GenCore version 5.1.6

OM protein - nucleic search, using frame_plus_p2n model

Run on: February 12, 2004, 19:34:21 ; Search time 93.2699 Seconds
(without alignments)
1750.959 Million cell updates/sec

Title: US-08-978-217-16_COPY_2_371
Perfect score: 1980
Sequence: 1 AATCEISNVFSNYFNAMYSS.....YKFGKNSSGWKEEEVGESRN 370

Scoring table: BLOSUM62
Xgapop 10.0 , Xgapext 0.5
Ygapop 10.0 , Ygapext 0.5
Fgapop 6.0 , Fgapext 7.0
Delop 6.0 , Delext 7.0

Searched: 569978 seqs, 220691566 residues

Total number of hits satisfying chosen parameters: 1139956

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Command line parameters:
-MODEL=frame+_p2n.model -DEV=xlh
-Q=/cgn2_1/USPTO_spool/US08978217/runat_10022004_133826_20481/app_query.fasta_1.1500
-DB=Issued_Patents_NA -QFMT=fastap -SUFFIX=rni -MINMATCH=0.1 -LOOPCL=0
-LOOPEXT=0 -UNITS=bits -START=1 -END=-1 -MATRIX=blosum62 -TRANS=human40.cdi
-LIST=45 -DOCALIGN=200 -THR_SCORE=pct -THR_MAX=100 -THR_MIN=0 -ALIGN=15
-MODE=LOCAL -OUTFMT=pto -NORM=ext -HEAPSIZE=500 -MINLEN=0 -MAXLEN=2000000000
-USER=US08978217_@CGN_1_1_115_@runat_10022004_133826_20481 -NCPU=6 -ICPU=3
-NO_MMAP -LARGEQUERY -NEG_SCORES=0 -WAIT -DSPBLOCK=100 -LONGLOG
-DEV_TIMEOUT=120 -WARN_TIMEOUT=30 -THREADS=1 -XGAPOP=10 -XGAPEXT=0.5 -FGAPOP=6
-FGAPEXT=7 -YGAPOP=10 -YGAPEXT=0.5 -DELOP=6 -DELEXT=7

Database : Issued_Patents_NA:*
1: /cgn2_6/ptodata/1/ina/5A_COMB.seq:*
2: /cgn2_6/ptodata/1/ina/5B_COMB.seq:*
3: /cgn2_6/ptodata/1/ina/6A_COMB.seq:*
4: /cgn2_6/ptodata/1/ina/6B_COMB.seq:*
5: /cgn2_6/ptodata/1/ina/PCTUS_COMB.seq:*
6: /cgn2_6/ptodata/1/ina/backfiles1.seq:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	1707	86.2	1907	4	US-09-300-958A-27	Sequence 27, Appl
2	1707	86.2	1907	4	US-09-570-593-4	Sequence 4, Appli
3	1707	86.2	1920	1	US-08-746-789A-1	Sequence 1, Appli
4	803	40.6	502	4	US-09-389-681-282	Sequence 282, App
5	803	40.6	502	4	US-09-620-405B-282	Sequence 282, App
6	803	40.6	502	4	US-09-339-338-282	Sequence 282, App
7	803	40.6	502	4	US-09-433-826B-282	Sequence 282, App
8	803	40.6	502	4	US-09-604-287A-282	Sequence 282, App
9	586	29.6	5427	3	US-09-009-913-2	Sequence 2, Appli
10	580	29.3	5510	3	US-09-009-913-3	Sequence 3, Appli
11	580	29.3	5667	3	US-09-009-913-4	Sequence 4, Appli
c 12	543	27.4	852	3	US-09-020-956-44	Sequence 44, Appl
c 13	543	27.4	852	3	US-09-030-607-44	Sequence 44, Appl
c 14	543	27.4	852	4	US-09-439-313-44	Sequence 44, Appl
c 15	543	27.4	852	4	US-09-352-616A-44	Sequence 44, Appl
c 16	543	27.4	852	4	US-09-232-149A-44	Sequence 44, Appl
17	507	25.6	848	3	US-09-009-913-338	Sequence 338, App
18	435.5	22.0	2280	3	US-09-009-913-8	Sequence 8, Appli
19	435.5	22.0	2428	3	US-09-009-913-6	Sequence 6, Appli
20	435.5	22.0	2498	3	US-09-009-913-10	Sequence 10, Appl
21	270	13.6	237	4	US-09-016-434-927	Sequence 927, App
22	238.5	12.0	2975	1	US-08-368-281-1	Sequence 1, Appli
23	238.5	12.0	3240	1	US-08-368-281-3	Sequence 3, Appli
24	234.5	11.8	1528	3	US-08-878-177-3	Sequence 3, Appli
25	233.5	11.8	1894	4	US-09-570-593-1	Sequence 1, Appli
26	233.5	11.8	1905	3	US-09-055-113-2	Sequence 2, Appli
27	233.5	11.8	3317	4	US-09-570-593-12	Sequence 12, Appl
28	225.5	11.4	1604	1	US-08-306-691B-43	Sequence 43, Appl
29	225.5	11.4	1604	5	PCT-US93-06251-9	Sequence 9, Appli
30	225	11.4	1447	3	US-08-878-177-1	Sequence 1, Appli
31	225	11.4	2938	2	US-08-343-443B-3	Sequence 3, Appli
32	220	11.1	2268	3	US-09-344-579-1	Sequence 1, Appli
33	214	10.8	1752	3	US-09-360-779-1	Sequence 1, Appli
34	214	10.8	1752	4	US-09-435-335-1	Sequence 1, Appli
35	214	10.8	1933	4	US-09-920-759-3	Sequence 3, Appli
36	214	10.8	1976	4	US-09-920-759-10	Sequence 10, Appl
37	202.5	10.2	2266	2	US-09-213-767-1	Sequence 1, Appli
38	198	10.0	665	4	US-09-920-759-11	Sequence 11, Appl
39	180.5	9.1	2667	2	US-08-469-412A-1	Sequence 1, Appli
40	180.5	9.1	2667	3	US-09-021-715-1	Sequence 1, Appli
41	179	9.0	2410	2	US-08-780-835B-1	Sequence 1, Appli
42	179	9.0	2410	3	US-09-303-268-1	Sequence 1, Appli
43	179	9.0	2410	3	US-09-116-049-1	Sequence 1, Appli
44	179	9.0	2410	4	US-09-884-363-1	Sequence 1, Appli
45	177	8.9	2064	3	US-08-875-944B-1	Sequence 1, Appli

ALIGNMENTS

RESULT 1
US-09-300-958A-27
; Sequence 27, Application US/09300958A
; Patent No. 6495319
; GENERAL INFORMATION:
; APPLICANT: McClelland, Michael
; APPLICANT: Welsh, John
; APPLICANT: Trenkle, Thomas
; TITLE OF INVENTION: Reduced Complexity Nucleic Acid Targets and Methods of
; TITLE OF INVENTION: Using Same
; FILE REFERENCE: P-PH 3457
; CURRENT APPLICATION NUMBER: US/09/300,958A
; CURRENT FILING DATE: 1999-04-27
; PRIOR APPLICATION NUMBER: 60/083,331
; PRIOR FILING DATE: 1998-04-27
; PRIOR APPLICATION NUMBER: 60/098,070
; PRIOR FILING DATE: 1998-08-27
; PRIOR APPLICATION NUMBER: 60/118,624
; PRIOR FILING DATE: 1999-02-04
; NUMBER OF SEQ ID NOS: 85
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 27
; LENGTH: 1907
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-300-958A-27

Alignment Scores:

Pred. No.:	1.64e-172	Length:	1907
Score:	1707.00	Matches:	322
Percent Similarity:	92.72%	Conservative:	22
Best Local Similarity:	86.79%	Mismatches:	25
Query Match:	86.21%	Indels:	2
DB:	4	Gaps:	2

US-08-978-217-16_COPY_2_371 (1-370) x US-09-300-958A-27 (1-1907)

```
Qy          1 AlaAlaThrCysGluIleSerAsnValPheSerAsnTyrPheAsnAlaMetTyrSerSer 20
Db         99 GCTGCAACCTGTGAGATTAGCAACATTTTTAGCAACTACTTCAGTGCGATGTACAGCTCG 158

Qy         21 GluAspProThrLeuAlaProAlaProPro---ThrThrPheGlyThrGluAspLeuVal 39
Db        159 GAGGACTCCACCCTGGCCTCTGTTCCCCCTGCTGCCACCTTTGGGGCCGATGACTTGGTA 218

Qy         40 LeuThrLeuAsnAsnGlnGlnMetThrLeuGluGlyProGluLysAlaSerTrpThrSer 59
Db        219 CTGACCCTGAGCAACCCCCAGATGTCATTGGAGGGTACAGAGAAGGCCAGCTGGTTGGGG 278

Qy         60 GluArgProGlnPheTrpSerLysThrGlnValLeuGluTrpIleSerTyrGlnValGlu 79
Db        279 GAACAGCCCCAGTTCTGGTCGAAGACGCAGGTTCTGGACTGGATCAGCTACCAAGTGGAG 338

Qy         80 LysAsnLysTyrAspAlaSerSerIleAspPheSerArgCysAsnMetAspGlyAlaThr 99
Db        339 AAGAACAAGTACGACGCAAGCGCCATTGACTTCTCACGATGTGACATGGATGGCGCCACC 398

Qy        100 LeuCysSerCysAlaLeuGluGluLeuArgLeuValPheGlyProLeuGlyAspGlnLeu 119
Db        399 CTCTGCAATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGCCTCTGGGGGACCAACTC 458

Qy        120 HisAlaGlnLeuArgAspLeuThrSerAsnSerSerAspGluLeuSerTrpIleIleGlu 139
Db        459 CATGCCCAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATTGAG 518

Qy        140 LeuLeuGluLysAspGlyMetSerPheGlnGluSerLeuGlyAspLeuGlyProPheAsp 159
Db        519 CTGCTGGAGAAGGATGGCATGGCCTTCCAGGAGGCCCTA---GACCCAGGGCCCTTTGAC 575

Qy        160 GlnGlySerProPheAlaGlnGluLeuLeuAspAspGlyArgGlnAlaSerProTyrTyr 179
Db        576 CAGGGCAGCCCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCAC 635

Qy        180 CysSerThrTyrGlyProGlyAlaProSerProGlySerSerAspValSerThrAlaArg 199
Db        636 CCCGGCAGCTGTGGCGCAGGAGCCCCCTCCCCTGGCAGCTCTGACGTCTCCACCGCAGGG 695

Qy        200 ThrAlaThrProGlnSerSerHisAlaSerAspSerGlyGlySerAspValAspLeuAsp 219
Db        696 ACTGGTGCTTCTCGGAGCTCCCACTCCTCAGACTCCGGTGGAAGTGACGTGGACCTGGAT 755

Qy        220 LeuThrGluSerLysValProProArgAspAspPheThrAspTyrLysLysGlyGluPro 239
Db        756 CCCACTGATGGCAAGCTCTTCCCCAGCGATGGTTTTCGTGACTGCAAGAAGGGGGATCCC 815

Qy        240 LysHisGlyLysArgLysArgGlyArgProArgLysLeuSerLysGluTyrTrpAspCys 259
Db        816 AAGCACGGGAAGCGGAAACGAGGCCGGCCCCGAAAGCTGAGCAAAGAGTACTGGGACTGT 875

Qy        260 LeuGluGlyLysLysSerLysHisAlaProArgGlyThrHisLeuTrpGluPheIleArg 279
Db        876 CTCGAGGGCAAGAAGAGCAAGCACGCGCCCAGAGGCACCCACCTGTGGGAGTTCATCCGG 935

Qy        280 AspIleLeuIleHisProGluLeuAsnGluGlyLeuMetLysTrpGluAsnArgHisGlu 299
Db        936 GACATCCTCATCCACCCGGAGCTCAACGAGGGCCTCATGAAGTGGGAGAATCGGCATGAA 995

Qy        300 GlyValPheLysPheLeuArgSerGluAlaValAlaGlnLeuTrpGlyGlnLysLysLys 319
Db        996 GGCGTCTTCAAGTTCCTGCGCTCCGAGGCTGTGGCCCAACTATGGGGCCAAAAGAAAAAG 1055

Qy        320 AsnSerAsnMetThrTyrGluLysLeuSerArgAlaMetArgTyrTyrTyrLysArgGlu 339
Db       1056 AACAGCAACATGACCTACGAGAAGCTGAGCCGGGCCATGAGGTACTACTACAAACGGGAG 1115

Qy        340 IleLeuGluArgValAspGlyArgArgLeuValTyrLysPheGlyLysAsnSerSerGly 359
Db       1116 ATCCTGGAACGGGTGGATGGCCGGCGACTCGTCTACAAGTTTGGCAAAAACTCAAGCGGC 1175

Qy        360 TrpLysGluGluGluValGlyGluSerArgAsn 370
Db       1176 TGGAAGGAGGAAGAGGTTCTCCAGAGTCGGAAC 1208
```

RESULT 2
US-09-570-593-4
; Sequence 4, Application US/09570593
; Patent No. 6566063
; GENERAL INFORMATION:
; APPLICANT: Kaufmann, Joerg
; APPLICANT: Xin, Hong
; APPLICANT: Harrowe, Greg
; TITLE OF INVENTION: EXPRESSION OF ETS-DOMAIN PROTEINS IN
; TITLE OF INVENTION: CANCER
; FILE REFERENCE: 2300-1556
; CURRENT APPLICATION NUMBER: US/09/570,593
; CURRENT FILING DATE: 2000-05-12
; PRIOR APPLICATION NUMBER: 60/134,112
; PRIOR FILING DATE: 1999-05-14
; NUMBER OF SEQ ID NOS: 13
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 4
; LENGTH: 1907
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (96)...(1211)
; OTHER INFORMATION: Human epithelial-restricted with serine box (ESX)
; OTHER INFORMATION: protein.
US-09-570-593-4

Alignment Scores:

Pred. No.:	1.64e-172	Length:	1907
Score:	1707.00	Matches:	322
Percent Similarity:	92.72%	Conservative:	22
Best Local Similarity:	86.79%	Mismatches:	25
Query Match:	86.21%	Indels:	2
DB:	4	Gaps:	2

US-08-978-217-16_COPY_2_371 (1-370) x US-09-570-593-4 (1-1907)


```
Qy          1 AlaAlaThrCysGluIleSerAsnValPheSerAsnTyrPheAsnAlaMetTyrSerSer 20
Db         99 GCTGCAACCTGTGAGATTAGCAACATTTTTAGCAACTACTTCAGTGCGATGTACAGCTCG 158

Qy         21 GluAspProThrLeuAlaProAlaProPro---ThrThrPheGlyThrGluAspLeuVal 39
Db        159 GAGGACTCCACCCTGGCCTCTGTTCCCCCTGCTGCCACCTTTGGGGCCGATGACTTGGTA 218

Qy         40 LeuThrLeuAsnAsnGlnGlnMetThrLeuGluGlyProGluLysAlaSerTrpThrSer 59
Db        219 CTGACCCTGAGCAACCCCCAGATGTCATTGGAGGGTACAGAGAAGGCCAGCTGGTTGGGG 278

Qy         60 GluArgProGlnPheTrpSerLysThrGlnValLeuGluTrpIleSerTyrGlnValGlu 79
Db        279 GAACAGCCCCAGTTCTGGTCGAAGACGCAGGTTCTGGACTGGATCAGCTACCAAGTGGAG 338

Qy         80 LysAsnLysTyrAspAlaSerSerIleAspPheSerArgCysAsnMetAspGlyAlaThr 99
Db        339 AAGAACAAGTACGACGCAAGCGCCATTGACTTCTCACGATGTGACATGGATGGCGCCACC 398

Qy        100 LeuCysSerCysAlaLeuGluGluLeuArgLeuValPheGlyProLeuGlyAspGlnLeu 119
Db        399 CTCTGCAATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGCCTCTGGGGGACCAACTC 458

Qy        120 HisAlaGlnLeuArgAspLeuThrSerAsnSerSerAspGluLeuSerTrpIleIleGlu 139
Db        459 CATGCCCAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATTGAG 518

Qy        140 LeuLeuGluLysAspGlyMetSerPheGlnGluSerLeuGlyAspLeuGlyProPheAsp 159
Db        519 CTGCTGGAGAAGGATGGCATGGCCTTCCAGGAGGCCCTA---GACCCAGGGCCCTTTGAC 575
```

```
Qy        160 GlnGlySerProPheAlaGlnGluLeuLeuAspAspGlyArgGlnAlaSerProTyrTyr 179
              ||||||||||||||||||||||||||||||||||||:::|||||||||||||||:::
Db        576 CAGGGCAGCCCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCAC 635

Qy        180 CysSerThrTyrGlyProGlyAlaProSerProGlySerSerAspValSerThrAlaArg 199
                  :::   |||   ||||||||||||||||||||||||||||||||||||||||
Db        636 CCCGGCAGCTGTGGCGCAGGAGCCCCCTCCCCTGGCAGCTCTGACGTCTCCACCGCAGGG 695

Qy        200 ThrAlaThrProGlnSerSerHisAlaSerAspSerGlyGlySerAspValAspLeuAsp 219
              |||         :::||||||||:::|||||||||||||||||||||||||||||||||
Db        696 ACTGGTGCTTCTCGGAGCTCCCACTCCTCAGACTCCGGTGGAAGTGACGTGGACCTGGAT 755

Qy        220 LeuThrGluSerLysValProProArgAspAspPheThrAspTyrLysLysGlyGluPro 239
                ||:::  |||:::||||||  |||  |||  ||  ||||||||||:::|||
Db        756 CCCACTGATGGCAAGCTCTTCCCCAGCGATGGTTTTCGTGACTGCAAGAAGGGGGATCCC 815

Qy        240 LysHisGlyLysArgLysArgGlyArgProArgLysLeuSerLysGluTyrTrpAspCys 259
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        816 AAGCACGGGAAGCGGAAACGAGGCCGGCCCCGAAAGCTGAGCAAAGAGTACTGGGACTGT 875

Qy        260 LeuGluGlyLysLysSerLysHisAlaProArgGlyThrHisLeuTrpGluPheIleArg 279
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        876 CTCGAGGGCAAGAAGAGCAAGCACGCGCCCAGAGGCACCCACCTGTGGGAGTTCATCCGG 935

Qy        280 AspIleLeuIleHisProGluLeuAsnGluGlyLeuMetLysTrpGluAsnArgHisGlu 299
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        936 GACATCCTCATCCACCCGGAGCTCAACGAGGGCCTCATGAAGTGGGAGAATCGGCATGAA 995

Qy        300 GlyValPheLysPheLeuArgSerGluAlaValAlaGlnLeuTrpGlyGlnLysLysLys 319
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        996 GGCGTCTTCAAGTTCCTGCGCTCCGAGGCTGTGGCCCAACTATGGGGCCAAAAGAAAAAG 1055

Qy        320 AsnSerAsnMetThrTyrGluLysLeuSerArgAlaMetArgTyrTyrTyrLysArgGlu 339
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1056 AACAGCAACATGACCTACGAGAAGCTGAGCCGGGCCATGAGGTACTACTACAAACGGGAG 1115

Qy        340 IleLeuGluArgValAspGlyArgArgLeuValTyrLysPheGlyLysAsnSerSerGly 359
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1116 ATCCTGGAACGGGTGGATGGCCGGCGACTCGTCTACAAGTTTGGCAAAAACTCAAGCGGC 1175

Qy        360 TrpLysGluGluGluValGlyGluSerArgAsn 370
              ||||||||||||||||   :::||||||||||
Db       1176 TGGAAGGAGGAAGAGGTTCTCCAGAGTCGGAAC 1208

RESULT 3
US-08-746-789A-1
; Sequence 1, Application US/08746789A
; Patent No. 5789200
;  GENERAL INFORMATION:
;    APPLICANT:  Ismail Kola, Martin J. Tymms, Christine DeBouck
;    TITLE OF INVENTION:  A No. 5789200el Human ETS Family Member, ELF3
;    NUMBER OF SEQUENCES:  4
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  SmithKline Beecham Corporation
;      STREET:  709 Swedeland Road, P.O. Box 1539
;      CITY:  King of Prussia
;      STATE:  PA
;      COUNTRY:  USA
;      ZIP:  19406-0939
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  DISKETTE, 3.5 INCH, 1.44 Mb STORAGE
;      COMPUTER:  IBM 486
;      OPERATING SYSTEM:  WINDOWS FOR WORKGROUPS
;      SOFTWARE:  MICROSOFT WORD
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/746,789A
;      FILING DATE:  No. 5789200ember 15, 1996
;      CLASSIFICATION:  514
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:
;      FILING DATE:
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  William T. Han
;      REGISTRATION NUMBER:  34,344
;      REFERENCE/DOCKET NUMBER:  ATG 50024
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  610 270 5219
;      TELEFAX:  610 270 4026
;  INFORMATION FOR SEQ ID NO:  1:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  1920
;      TYPE:  Nucleic Acid
;      STRANDEDNESS:  Single
;      TOPOLOGY:  Linear
;    ANTI-SENSE:  No
US-08-746-789A-1

Alignment Scores:
Pred. No.:                1.66e-172       Length:          1920
Score:                    1707.00         Matches:         322
Percent Similarity:       92.72%          Conservative:    22
Best Local Similarity:    86.79%          Mismatches:      25
Query Match:              86.21%          Indels:          2
DB:                       1               Gaps:            2

US-08-978-217-16_COPY_2_371 (1-370) x US-08-746-789A-1 (1-1920)

Qy          1 AlaAlaThrCysGluIleSerAsnValPheSerAsnTyrPheAsnAlaMetTyrSerSer 20
              ||||||||||||||||||||||:::|||||||||||||||:::|||||||||||||||
Db        118 GCTGCAACCTGTGAGATTAGCAACATTTTTAGCAACTACTTCAGTGCGATGTACAGCTCG 177

Qy         21 GluAspProThrLeuAlaProAlaProPro---ThrThrPheGlyThrGluAspLeuVal 39
              ||||||  |||||||||      ||||||      |||||||||   :::|||||||||
Db        178 GAGGACTCCACCTTGGCCTCTGTTCCCCCTGCTGCCACCTTTGGGGCCGATGACTTGGTA 237

Qy         40 LeuThrLeuAsnAsnGlnGlnMetThrLeuGluGlyProGluLysAlaSerTrpThrSer 59
              |||||||||:::|||    ||||||:::|||||||||   ||||||||||||||||
Db        238 CTGACCCTGAGCAACCCCCAGATGTCATTGGAGGGTACAGAGAAGGCTAGCTGGTTGGGG 297

Qy         60 GluArgProGlnPheTrpSerLysThrGlnValLeuGluTrpIleSerTyrGlnValGlu 79
              |||:::|||||||||||||||||||||||||||||:::|||||||||||||||||||
Db        298 GAACAGCCCCAGTTCTGGTCGAAGACGCAGGTTCTGGACTGGATCAGCTACCAAGTGGAG 357

Qy         80 LysAsnLysTyrAspAlaSerSerIleAspPheSerArgCysAsnMetAspGlyAlaThr 99
              |||||||||||||||||||:::|||||||||||||||||||:::|||||||||||||||
Db        358 AAGAACAAGTACGACGCAAGCGCCATTGACTTCTCACGATGTGACATGGATGGGGCCACC 417

Qy        100 LeuCysSerCysAlaLeuGluGluLeuArgLeuValPheGlyProLeuGlyAspGlnLeu 119
              ||||||:::|||||||||||||||||||||||||||||||||||||||||||||||||
Db        418 CTCTGCAATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGCCTCTGGGGGACCAACTC 477

Qy        120 HisAlaGlnLeuArgAspLeuThrSerAsnSerSerAspGluLeuSerTrpIleIleGlu 139
              ||||||||||||||||||||||||||:::|||||||||||||||||||||||||||||
Db        478 CATGCCCAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATTGAG 537

Qy        140 LeuLeuGluLysAspGlyMetSerPheGlnGluSerLeuGlyAspLeuGlyProPheAsp 159
              ||||||||||||||||||:::|||||||||:::|||   |||   ||||||||||||
Db        538 CTGCTGGAGAAGGATGGCATGGCCTTCCAGGAGGCCCTA---GACCCAGGGCCCTTTGAC 594

Qy        160 GlnGlySerProPheAlaGlnGluLeuLeuAspAspGlyArgGlnAlaSerProTyrTyr 179
              ||||||||||||||||||||||||||||||||||||:::|||||||||||||||:::
Db        595 CAGGGCAGCCCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCAC 654

Qy        180 CysSerThrTyrGlyProGlyAlaProSerProGlySerSerAspValSerThrAlaArg 199
                  :::   |||   ||||||||||||||||||||||||||||||||||||||||
Db        655 CCCGGCAGCTGTGGCGCAGGAGCCCCCTCCCCTGGCAGCTCTGACGTCTCCACCGCAGGG 714

Qy        200 ThrAlaThrProGlnSerSerHisAlaSerAspSerGlyGlySerAspValAspLeuAsp 219
              |||         :::||||||||:::|||||||||||||||||||||||||||||||||
Db        715 ACTGGTGCTTCTCGGAGCTCCCACTCCTCAGACTCCGGTGGAAGTGACGTGGACCTGGAT 774

Qy        220 LeuThrGluSerLysValProProArgAspAspPheThrAspTyrLysLysGlyGluPro 239
                ||:::  |||:::||||||  |||  |||  ||  ||||||||||:::|||
Db        775 CCCACTGATGGCAAGCTCTTCCCCAGCGATGGTTTTCGTGACTGCAAGAAGGGGGATCCC 834
```

```
Qy        240 LysHisGlyLysArgLysArgGlyArgProArgLysLeuSerLysGluTyrTrpAspCys 259
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        835 AAGCACGGGAAGCGGAAACGAGGCCGGCCCCGAAAGCTGAGCAAAGAGTACTGGGACTGT 894

Qy        260 LeuGluGlyLysLysSerLysHisAlaProArgGlyThrHisLeuTrpGluPheIleArg 279
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        895 CTCGAGGGCAAGAAGAGCAAGCACGCGCCCAGAGGCACCCACCTGTGGGAGTTCATCCGG 954

Qy        280 AspIleLeuIleHisProGluLeuAsnGluGlyLeuMetLysTrpGluAsnArgHisGlu 299
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        955 GACATCCTCATCCACCCGGAGCTCAACGAGGGCCTCATGAAGTGGGAGAATCGGCATGAA 1014

Qy        300 GlyValPheLysPheLeuArgSerGluAlaValAlaGlnLeuTrpGlyGlnLysLysLys 319
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1015 GGCGTCTTCAAGTTCCTGCGCTCCGAGGCTGTGGCCCAACTATGGGGGCAAAAGAAAAAG 1074

Qy        320 AsnSerAsnMetThrTyrGluLysLeuSerArgAlaMetArgTyrTyrTyrLysArgGlu 339
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1075 AACAGCAACATGACCTACGAGAAGCTGAGCCGGGCCATGAGGTACTACTACAAACGGGAG 1134

Qy        340 IleLeuGluArgValAspGlyArgArgLeuValTyrLysPheGlyLysAsnSerSerGly 359
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1135 ATCCTGGAACGGGTGGATGGCCGGCGACTCGTCTACAAGTTTGGCAAAAACTCAAGCGGC 1194

Qy        360 TrpLysGluGluGluValGlyGluSerArgAsn 370
              ||||||||||||||||||   :::|||||||||
Db       1195 TGGAAGGAGGAAGAGGTTCTCCAGAGTCGGAAC 1227
```

RESULT 4
US-09-389-681-282
; Sequence 282, Application US/09389681A
; Patent No. 6518237
; GENERAL INFORMATION:
; APPLICANT: Yuqui, Jiang
; APPLICANT: Dillon, Davin C.
; APPLICANT: Mitcham, Jennifer L.
; APPLICANT: Xu, Jiangchun
; TITLE OF INVENTION: COMPOSITIONS FOR THE TREATMENT AND
; TITLE OF INVENTION: DIAGNOSIS OF BREAST CANCER AND METHODS FOR THEIR USE
; FILE REFERENCE: 210121.470C3
; CURRENT APPLICATION NUMBER: US/09/389,681A
; CURRENT FILING DATE: 1999-09-02
; NUMBER OF SEQ ID NOS: 463
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 282
; LENGTH: 502
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-389-681-282

Alignment Scores:

Pred. No.:	7.91e-77	Length:	502
Score:	803.00	Matches:	149
Percent Similarity:	93.33%	Conservative:	5
Best Local Similarity:	90.30%	Mismatches:	11
Query Match:	40.56%	Indels:	0
DB:	4	Gaps:	0

US-08-978-217-16_COPY_2_371 (1-370) x US-09-389-681-282 (1-502)

```
Qy        184 GlyProGlyAlaProSerProGlySerSerAspValSerThrAlaArgThrAlaThrPro 203
              |||   ||||||||||||||||||||||||||||||||||||||||||   |||
Db          6 GGCGCAGGAGCCCCCTCCCCCGGCAGCTCTGACGTCTCCACCGCAGGGACTGGTGCTTCT 65

Qy        204 GlnSerSerHisAlaSerAspSerGlyGlySerAspValAspLeuAspLeuThrGluSer 223
              :::|||||||||:::|||||||||||||||||||||||||||||||   |||:::
Db         66 CGGAGCTCCCACTCCTCAGACTCCGGTGGAAGTGACGTGGACCTGGATCCCACTGATGGC 125

Qy        224 LysValPheProArgAspAspPheThrAspTyrLysLysGlyGluProLysHisGlyLys 243
              |||:::||||||   |||   |||   |||   |||||||||:::|||||||||||||||
Db        126 AAGCTCTTCCCCAGCGATGGTTTTCGTGACTGCAAGAAGGGGGATCCCAAGCACGGGAAG 185

Qy        244 ArgLysArgGlyArgProArgLysLeuSerLysGluTyrTrpAspCysLeuGluGlyLys 263
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        186 CGGAAACGAGGCCGGCCCCGAAAGCTGAGCAAAGAGTACTGGGACTGTCTCGAGGGCAAG 245

Qy        264 LysSerLysHisAlaProArgGlyThrHisLeuTrpGluPheIleArgAspIleLeuIle 283
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        246 AAGAGCAAGCACGCGCCCAGAGGCACCCACCTGTGGGAGTTCATCCGGGACATCCTCATC 305

Qy        284 HisProGluLeuAsnGluGlyLeuMetLysTrpGluAsnArgHisGluGlyValPheLys 303
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        306 CACCCGGAGCTCAACGAGGGCCTCATGAAGTGGGAGAATCGGCATGAAGGCGTCTTCAAG 365

Qy        304 PheLeuArgSerGluAlaValAlaGlnLeuTrpGlyGlnLysLysLysAsnSerAsnMet 323
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        366 TTCCTGCGCTCCGAGGCTGTGGCCCAACTATGGGGCCAAAAGAAAAAGAACAGCAACATG 425

Qy        324 ThrTyrGluLysLeuSerArgAlaMetArgTyrTyrTyrLysArgGluIleLeuGluArg 343
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        426 ACCTACGAGAAGCTGAGCCGGGCCATGAGGTACTACTACAAACGGGAGATCCTGGAACGG 485

Qy        344 ValAspGlyArgArg 348
              ||||||||||||||||
Db        486 GTGGATGGCCGGCGA 500

RESULT 5
US-09-620-405B-282
; Sequence 282, Application US/09620405B
; Patent No. 6528054
; GENERAL INFORMATION:
; APPLICANT: Jiang, Yuqiu
; APPLICANT: Dillon, Davin C.
; APPLICANT: Mitcham, Jennifer L.
; APPLICANT: Xu, Jiangchun
; APPLICANT: Harlocker, Susan L.
; APPLICANT: Hepler, William T.
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY AND
; TITLE OF INVENTION: DIAGNOSIS OF BREAST CANCER
; FILE REFERENCE: 210121.470C8
; CURRENT APPLICATION NUMBER: US/09/620,405B
; CURRENT FILING DATE: 2000-07-20
; NUMBER OF SEQ ID NOS: 495
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 282
; LENGTH: 502
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-620-405B-282

Alignment Scores:

| | | | |
|---|---|---|---|
| Pred. No.: | 7.91e-77 | Length: | 502 |
| Score: | 803.00 | Matches: | 149 |
| Percent Similarity: | 93.33% | Conservative: | 5 |
| Best Local Similarity: | 90.30% | Mismatches: | 11 |
| Query Match: | 40.56% | Indels: | 0 |
| DB: | 4 | Gaps: | 0 |

US-08-978-217-16_COPY_2_371 (1-370) x US-09-620-405B-282 (1-502)

```
Qy   184 GlyProGlyAlaProSerProGlySerSerAspValSerThrAlaArgThrAlaThrPro 203
              ||| |||||||||||||||||||||||||||||||||||||||||| |||
Db   6 GGCGCAGGAGCCCCCTCCCCCGGCAGCTCTGACGTCTCCACCGCAGGGACTGGTGCTTCT 65

Qy   204 GlnSerSerHisAlaSerAspSerGlyGlySerAspValAspLeuAspLeuThrGluSer 223
              :::|||||||||:::||||||||||||||||||||||||||||||| |||:::
Db   66 CGGAGCTCCCACTCCTCAGACTCCGGTGGAAGTGACGTGGACCTGGATCCCACTGATGGC 125

Qy   224 LysValPheProArgAspAspPheThrAspTyrLysLysGlyGluProLysHisGlyLys 243
              |||:::|||||| ||| ||| ||| |||||||||:::|||||||||||||||
Db   126 AAGCTCTTCCCCAGCGATGGTTTTCGTGACTGCAAGAAGGGGGATCCCAAGCACGGGAAG 185

Qy   244 ArgLysArgGlyArgProArgLysLeuSerLysGluTyrTrpAspCysLeuGluGlyLys 263
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db   186 CGGAAACGAGGCCGGCCCCGAAAGCTGAGCAAAGAGTACTGGGACTGTCTCGAGGGCAAG 245
```
```

```
Qy        264 LysSerLysHisAlaProArgGlyThrHisLeuTrpGluPheIleArgAspIleLeuIle 283
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        246 AAGAGCAAGCACGCGCCCAGAGGCACCCACCTGTGGGAGTTCATCCGGGACATCCTCATC 305

Qy        284 HisProGluLeuAsnGluGlyLeuMetLysTrpGluAsnArgHisGluGlyValPheLys 303
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        306 CACCCGGAGCTCAACGAGGGCCTCATGAAGTGGGAGAATCGGCATGAAGGCGTCTTCAAG 365

Qy        304 PheLeuArgSerGluAlaValAlaGlnLeuTrpGlyGlnLysLysLysAsnSerAsnMet 323
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        366 TTCCTGCGCTCCGAGGCTGTGGCCCAACTATGGGGCCAAAAGAAAAAGAACAGCAACATG 425

Qy        324 ThrTyrGluLysLeuSerArgAlaMetArgTyrTyrTyrLysArgGluIleLeuGluArg 343
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        426 ACCTACGAGAAGCTGAGCCGGGCCATGAGGTACTACTACAAACGGGAGATCCTGGAACGG 485

Qy        344 ValAspGlyArgArg 348
              ||||||||||||||||
Db        486 GTGGATGGCCGGCGA 500
```

RESULT 6
US-09-339-338-282
; Sequence 282, Application US/09339338A
; Patent No. 6573368
; GENERAL INFORMATION:
; APPLICANT: Yuqiu, Jiang
; APPLICANT: Dillon, Davin C.
; APPLICANT: Mitcham, Jennifer L.
; APPLICANT: Xu, Jiangchun
; TITLE OF INVENTION: COMPOSITIONS FOR THE TREATMENT AND
; TITLE OF INVENTION: DIAGNOSIS OF BREAST CANCER AND METHODS FOR THEIR USE
; FILE REFERENCE: 210121.470C2
; CURRENT APPLICATION NUMBER: US/09/339,338A
; CURRENT FILING DATE: 1999-06-23
; NUMBER OF SEQ ID NOS: 315
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 282
; LENGTH: 502
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-339-338-282

Alignment Scores:

Pred. No.:	7.91e-77	Length:	502
Score:	803.00	Matches:	149
Percent Similarity:	93.33%	Conservative:	5
Best Local Similarity:	90.30%	Mismatches:	11
Query Match:	40.56%	Indels:	0
DB:	4	Gaps:	0

US-08-978-217-16_COPY_2_371 (1-370) x US-09-339-338-282 (1-502)

```
Qy        184 GlyProGlyAlaProSerProGlySerSerAspValSerThrAlaArgThrAlaThrPro 203
              |||   ||||||||||||||||||||||||||||||||||||||||   |||
Db          6 GGCGCAGGAGCCCCCTCCCCCGGCAGCTCTGACGTCTCCACCGCAGGGACTGGTGCTTCT 65

Qy        204 GlnSerSerHisAlaSerAspSerGlyGlySerAspValAspLeuAspLeuThrGluSer 223
              :::|||||||||:::|||||||||||||||||||||||||||||||||   |||:::
Db         66 CGGAGCTCCCACTCCTCAGACTCCGGTGGAAGTGACGTGGACCTGGATCCCACTGATGGC 125

Qy        224 LysValPheProArgAspAspPheThrAspTyrLysLysGlyGluProLysHisGlyLys 243
              |||:::||||||   |||   |||   |||   |||||||||:::|||||||||||||||
Db        126 AAGCTCTTCCCCAGCGATGGTTTTCGTGACTGCAAGAAGGGGGATCCCAAGCACGGGAAG 185

Qy        244 ArgLysArgGlyArgProArgLysLeuSerLysGluTyrTrpAspCysLeuGluGlyLys 263
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        186 CGGAAACGAGGCCGGCCCCGAAAGCTGAGCAAAGAGTACTGGGACTGTCTCGAGGGCAAG 245

Qy        264 LysSerLysHisAlaProArgGlyThrHisLeuTrpGluPheIleArgAspIleLeuIle 283
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        246 AAGAGCAAGCACGCGCCCAGAGGCACCCACCTGTGGGAGTTCATCCGGGACATCCTCATC 305

Qy        284 HisProGluLeuAsnGluGlyLeuMetLysTrpGluAsnArgHisGluGlyValPheLys 303
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        306 CACCCGGAGCTCAACGAGGGCCTCATGAAGTGGGAGAATCGGCATGAAGGCGTCTTCAAG 365

Qy        304 PheLeuArgSerGluAlaValAlaGlnLeuTrpGlyGlnLysLysLysAsnSerAsnMet 323
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        366 TTCCTGCGCTCCGAGGCTGTGGCCCAACTATGGGGCCAAAAGAAAAAGAACAGCAACATG 425

Qy        324 ThrTyrGluLysLeuSerArgAlaMetArgTyrTyrTyrLysArgGluIleLeuGluArg 343
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        426 ACCTACGAGAAGCTGAGCCGGGCCATGAGGTACTACTACAAACGGGAGATCCTGGAACGG 485

Qy        344 ValAspGlyArgArg 348
              ||||||||||||||||
Db        486 GTGGATGGCCGGCGA 500
```

RESULT 7
US-09-433-826B-282
; Sequence 282, Application US/09433826B
; Patent No. 6579973
; GENERAL INFORMATION:
; APPLICANT: Jiang, Yuqui
; APPLICANT: Dillon, Davin C.
; APPLICANT: Mitcham, Jennifer L.
; APPLICANT: Xu, Jiangchun
; APPLICANT: Harlocker, Susan L.
; TITLE OF INVENTION: COMPOSITIONS FOR THE TREATMENT AND
; TITLE OF INVENTION: DIAGNOSIS OF BREAST CANCER AND METHODS FOR THEIR USE
; FILE REFERENCE: 210121.470C4
; CURRENT APPLICATION NUMBER: US/09/433,826B
; CURRENT FILING DATE: 1999-11-03
; NUMBER OF SEQ ID NOS: 474
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 282
; LENGTH: 502
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-433-826B-282

Alignment Scores:

Pred. No.:	7.91e-77	Length:	502
Score:	803.00	Matches:	149
Percent Similarity:	93.33%	Conservative:	5
Best Local Similarity:	90.30%	Mismatches:	11
Query Match:	40.56%	Indels:	0
DB:	4	Gaps:	0

US-08-978-217-16_COPY_2_371 (1-370) x US-09-433-826B-282 (1-502)

```
Qy        184 GlyProGlyAlaProSerProGlySerSerAspValSerThrAlaArgThrAlaThrPro 203
              |||   ||||||||||||||||||||||||||||||||||||||||   |||
Db          6 GGCGCAGGAGCCCCCTCCCCCGGCAGCTCTGACGTCTCCACCGCAGGGACTGGTGCTTCT 65

Qy        204 GlnSerSerHisAlaSerAspSerGlyGlySerAspValAspLeuAspLeuThrGluSer 223
              :::|||||||||:::|||||||||||||||||||||||||||||||||   |||:::
Db         66 CGGAGCTCCCACTCCTCAGACTCCGGTGGAAGTGACGTGGACCTGGATCCCACTGATGGC 125

Qy        224 LysValPheProArgAspAspPheThrAspTyrLysLysGlyGluProLysHisGlyLys 243
              |||:::||||||   |||   |||   |||   |||||||||:::|||||||||||||||
Db        126 AAGCTCTTCCCCAGCGATGGTTTTCGTGACTGCAAGAAGGGGGATCCCAAGCACGGGAAG 185

Qy        244 ArgLysArgGlyArgProArgLysLeuSerLysGluTyrTrpAspCysLeuGluGlyLys 263
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        186 CGGAAACGAGGCCGGCCCCGAAAGCTGAGCAAAGAGTACTGGGACTGTCTCGAGGGCAAG 245

Qy        264 LysSerLysHisAlaProArgGlyThrHisLeuTrpGluPheIleArgAspIleLeuIle 283
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        246 AAGAGCAAGCACGCGCCCAGAGGCACCCACCTGTGGGAGTTCATCCGGGACATCCTCATC 305

Qy        284 HisProGluLeuAsnGluGlyLeuMetLysTrpGluAsnArgHisGluGlyValPheLys 303
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        306 CACCCGGAGCTCAACGAGGGCCTCATGAAGTGGGAGAATCGGCATGAAGGCGTCTTCAAG 365

Qy        304 PheLeuArgSerGluAlaValAlaGlnLeuTrpGlyGlnLysLysLysAsnSerAsnMet 323
```

```
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         366 TTCCTGCGCTCCGAGGCTGTGGCCCAACTATGGGGCCAAAAGAAAAAGAACAGCAACATG 425

Qy         324 ThrTyrGluLysLeuSerArgAlaMetArgTyrTyrTyrLysArgGluIleLeuGluArg 343
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         426 ACCTACGAGAAGCTGAGCCGGGCCATGAGGTACTACTACAAACGGGAGATCCTGGAACGG 485

Qy         344 ValAspGlyArgArg 348
               |||||||||||||||
Db         486 GTGGATGGCCGGCGA 500

RESULT 8
US-09-604-287A-282
; Sequence 282, Application US/09604287A
; Patent No. 6586572
; GENERAL INFORMATION:
;  APPLICANT: Jiang, Yuqiu
;  APPLICANT:  Dillon, Davin C.
;  APPLICANT:  Mitcham, Jennifer L.
;  APPLICANT:  Xu, Jiangchun
;  APPLICANT:  Harlocker, Susan L.
;  APPLICANT:  Hepler, William T.
;  TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY AND
;  TITLE OF INVENTION:  DIAGNOSIS OF BREAST CANCER
;  FILE REFERENCE: 210121.470C7
;  CURRENT APPLICATION NUMBER: US/09/604,287A
;  CURRENT FILING DATE:  2000-06-22
;  NUMBER OF SEQ ID NOS: 489
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 282
;   LENGTH: 502
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-604-287A-282

Alignment Scores:
Pred. No.:              7.91e-77      Length:        502
Score:                  803.00        Matches:       149
Percent Similarity:     93.33%        Conservative:  5
Best Local Similarity:  90.30%        Mismatches:    11
Query Match:            40.56%        Indels:        0
DB:                     4             Gaps:          0

US-08-978-217-16_COPY_2_371 (1-370) x US-09-604-287A-282 (1-502)

Qy         184 GlyProGlyAlaProSerProGlySerSerAspValSerThrAlaArgThrAlaThrPro 203
               |||   |||||||||||||||||||||||||||||||||||||||   |||
Db           6 GGCGCAGGAGCCCCCTCCCCCGGCAGCTCTGACGTCTCCACCGCAGGGACTGGTGCTTCT 65

Qy         204 GlnSerSerHisAlaSerAspSerGlyGlySerAspValAspLeuAspLeuThrGluSer 223
               :::|||||||||:::|||||||||||||||||||||||||||||||||   |||:::
Db          66 CGGAGCTCCCACTCCTCAGACTCCGGTGGAAGTGACGTGGACCTGGATCCCACTGATGGC 125

Qy         224 LysValPheProArgAspAspPheThrAspTyrLysLysGlyGluProLysHisGlyLys 243
               |||:::||||||   |||   |||   |||   |||||||||:::|||||||||||||||
Db         126 AAGCTCTTCCCCAGCGATGGTTTTCGTGACTGCAAGAAGGGGGATCCCAAGCACGGGAAG 185

Qy         244 ArgLysArgGlyArgProArgLysLeuSerLysGluTyrTrpAspCysLeuGluGlyLys 263
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         186 CGGAAACGAGGCCGGCCCCGAAAGCTGAGCAAAGAGTACTGGGACTGTCTCGAGGGCAAG 245

Qy         264 LysSerLysHisAlaProArgGlyThrHisLeuTrpGluPheIleArgAspIleLeuIle 283
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         246 AAGAGCAAGCACGCGCCCAGAGGCACCCACCTGTGGGAGTTCATCCGGGACATCCTCATC 305

Qy         284 HisProGluLeuAsnGluGlyLeuMetLysTrpGluAsnArgHisGluGlyValPheLys 303
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         306 CACCCGGAGCTCAACGAGGGCCTCATGAAGTGGGAGAATCGGCATGAAGGCGTCTTCAAG 365

Qy         304 PheLeuArgSerGluAlaValAlaGlnLeuTrpGlyGlnLysLysLysAsnSerAsnMet 323
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         366 TTCCTGCGCTCCGAGGCTGTGGCCCAACTATGGGGCCAAAAGAAAAAGAACAGCAACATG 425
```

```
Qy         324 ThrTyrGluLysLeuSerArgAlaMetArgTyrTyrTyrLysArgGluIleLeuGluArg 343
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         426 ACCTACGAGAAGCTGAGCCGGGCCATGAGGTACTACTACAAACGGGAGATCCTGGAACGG 485

Qy         344 ValAspGlyArgArg 348
               |||||||||||||||
Db         486 GTGGATGGCCGGCGA 500

RESULT 9
US-09-009-913-2
; Sequence 2, Application US/09009913
; Patent No. 6087485
;  GENERAL INFORMATION:
;    APPLICANT:  AxyS Pharmaceuticals, Inc.
;    TITLE OF INVENTION:  Asthma Related Genes
;    NUMBER OF SEQUENCES:  339
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Bozicevic & Reed, LLP
;      STREET:  285 Hamilton Ave, Suite 200
;      CITY:  Palo Alto
;      STATE:  CA
;      COUNTRY:  USA
;      ZIP:  94301
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Diskette
;      COMPUTER:  IBM Compatible
;      OPERATING SYSTEM:  DOS
;      SOFTWARE:  FastSEQ for Windows Version 2.0
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/009,913
;      FILING DATE:  21-JAN-1998
;      CLASSIFICATION:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:
;      FILING DATE:
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Sherwood, Pamela J
;      REGISTRATION NUMBER:  36,677
;      REFERENCE/DOCKET NUMBER:  SEQ-4P
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  650-327-3231
;      TELEFAX:  650-327-3231
;      TELEX:
;  INFORMATION FOR SEQ ID NO:  2:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  5427 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  double
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  cDNA
US-09-009-913-2

Alignment Scores:
Pred. No.:              4.64e-52      Length:        5427
Score:                  586.00        Matches:       141
Percent Similarity:     50.26%        Conservative:  51
Best Local Similarity:  36.91%        Mismatches:    86
Query Match:            29.60%        Indels:        104
DB:                     3             Gaps:          11

US-08-978-217-16_COPY_2_371 (1-370) x US-09-009-913-2 (1-5427)

Qy          26 AlaProAlaProProThrThr------------PheGlyThrGluAspLeuValLeuThr 41
               |||   :::||||||:::               |||   |||::::::|||   :::
Db          84 GCTGCCTCCCCTCCATCAGCCACAGCTATTGGATTTCCCACCCAGAATCTTTAGGTA--- 140

Qy          42 LeuAsnAsnGlnGlnMetThrLeuGluGly------------------------------ 51
                     |||:::   |||   |||||||||
Db         141 ------AATGAGATCATGATTCTGGAAGGAGGTGGTGTAATGAATCTCAACCCCGGCAAC 194

Qy          52 ---------ProGluLysAlaSerTrpThrSerGlu------------------------ 60
                           :::      :::||||||
Db         195 AACCTCCTTCACCAGCCGCCAGCCTGGACAGACAGCTACTCCACGTGCAATGTTTCCAGT 254
```

```
Qy          61 ----------------------------ArgProGlnPheTrpSerLysThrGlnVal 70
Db         255 GGGTTTTTTGGAGGCCAGTGGCATGAAATTCATCCTCAGTACTGGACCAAGTACCAGGTG 314

Qy          71 LeuGluTrpIleSerTyrGlnValGluLysAsnLysTyrAspAlaSerSerIleAspPhe 90
Db         315 TGGGAGTGGCTCCAGCACCTCCTGGACACCAACCAGCTGGATGCCAATTGTATCCCTTTC 374

Qy          91 SerArgCysAsnMetAspGlyAlaThrLeuCysSerCysAlaLeuGluGluLeuArgLeu 110
Db         375 CAAGAGTTCGACATCAACGGCGAGCACCTCTGCAGCATGAGTTTGCAGGAGTTCACCCGG 434

Qy         111 ValPheGlyProLeuGlyAspGlnLeuHisAlaGlnLeuArgAspLeuThrSerAsn--- 129
Db         435 GCGGCAGGGACGGCGGGGCAGCTCCTCTACAGCAACTTGCAGCATCTGAAGTGGAACGGC 494

Qy         130 ------SerSerAspGluLeuSerTrpIleIleGluLeuLeuGluLysAspGlyMetSer 147
Db         495 CAGTGCAGTAGTGAC----------------------------------------CTG 512

Qy         148 PheGlnGluSerLeuGlyAspLeuGlyProPheAspGlnGlySerProPheAlaGlnGlu 167
Db         513 TTCCAGTCCACACACAATGTCATTGTCAAGACTGAACAAACTGAGCCT---------TCC 563

Qy         168 LeuLeuAspAspGlyArgGlnAlaSerProTyrTyrCysSerThrTyrGlyProGlyAla 187
Db         564 ATCATGAACACCTGGAAAGACGAGAACTATTTATATGACACCAACTATGGT--------- 614

Qy         188 ProSerProGlySerSerAspValSerThrAlaArgThrAlaThrProGlnSerSerHis 207
Db         615 ------------------------AGCACA---------------------------- 620

Qy         208 AlaSerAspSerGlyGlySerAspValAspLeuAspLeuThrGluSerLysValPhePro 227
Db         621 ----------------------------GTAGATTTGTTGGACAGCAAAACTTTCTGC 650

Qy         228 ArgAspAspPhe---------------ThrAspTyrLysLysGlyGluProLysHisGly 242
Db         651 CGGGCTCAGATCTCCATGACAACCACCAGTCACCTTCCTGTTGCAGAGTCACCTGATATG 710

Qy         243 LysArgLysArgGlyArgProArgLysLeuSerLysGluTyrTrpAspCysLeuGluGly 262
Db         711 AAAAAGGAGCAAGACCCCCCTGCCAAGTGCCACACCAAA---------------------- 749

Qy         263 LysLysSerLysHisAlaProArgGlyThrHisLeuTrpGluPheIleArgAspIleLeu 282
Db         750 ---------AAGCACAACCCGAGAGGGACTCACTTATGGGAATTCATCCGCGACATCCTC 800

Qy         283 IleHisProGluLeuAsnGluGlyLeuMetLysTrpGluAsnArgHisGluGlyValPhe 302
Db         801 TTGAACCCAGACAAGAACCCAGGATTAATAAAATGGGAAGACCGATCTGAGGGCGTCTTC 860

Qy         303 LysPheLeuArgSerGluAlaValAlaGlnLeuTrpGlyGlnLysLysLysAsnSerAsn 322
Db         861 AGGTTCTTGAAATCAGAGGCAGTGGCTCAGCTATGGGGTAAAAAGAAGAACAACAGCAGC 920

Qy         323 MetThrTyrGluLysLeuSerArgAlaMetArgTyrTyrTyrLysArgGluIleLeuGlu 342
Db         921 ATGACCTATGAAAAGCTCAGCCGAGCTATGAGATATTACTACAAAAGAGAAATACTGGAG 980

Qy         343 ArgValAspGlyArgArgLeuValTyrLysPheGlyLysAsnSerSerGlyTrpLysGlu 362
Db         981 CGTGTGGATGGACGAAGACTGGTATATAAATTTGGGAAGAATGCCCGAGGATGGAGAGAA 1040

Qy         363 GluGlu 364
Db        1041 AATGAA 1046

RESULT 10
US-09-009-913-3
; Sequence 3, Application US/09009913
; Patent No. 6087485
;  GENERAL INFORMATION:
;    APPLICANT:  AxyS Pharmaceuticals, Inc.
;    TITLE OF INVENTION:  Asthma Related Genes
;    NUMBER OF SEQUENCES:  339
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Bozicevic & Reed, LLP
;      STREET:  285 Hamilton Ave, Suite 200
;      CITY:  Palo Alto
;      STATE:  CA
;      COUNTRY:  USA
;      ZIP:  94301
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Diskette
;      COMPUTER:  IBM Compatible
;      OPERATING SYSTEM:  DOS
;      SOFTWARE:  FastSEQ for Windows Version 2.0
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/009,913
;      FILING DATE:  21-JAN-1998
;      CLASSIFICATION:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:
;      FILING DATE:
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Sherwood, Pamela J
;      REGISTRATION NUMBER:  36,677
;      REFERENCE/DOCKET NUMBER:  SEQ-4P
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  650-327-3231
;      TELEFAX:  650-327-3231
;      TELEX:
;  INFORMATION FOR SEQ ID NO:  3:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  5510 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  double
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  cDNA
US-09-009-913-3

Alignment Scores:
Pred. No.:              2.08e-51        Length:          5510
Score:                  580.00          Matches:         129
Percent Similarity:     54.43%          Conservative:    43
Best Local Similarity:  40.82%          Mismatches:      78
Query Match:            29.29%          Indels:          66
DB:                     3               Gaps:            7

US-08-978-217-16_COPY_2_371 (1-370) x US-09-009-913-3 (1-5510)

Qy          57 TrpThrSerGluArgProGlnPheTrpSerLysThrGlnValLeuGluTrpIleSerTyr 76
Db         356 TGGCATGAAATTCATCCTCAGTACTGGACCAAGTACCAGGTGTGGGAGTGGCTCCAGCAC 415

Qy          77 GlnValGluLysAsnLysTyrAspAlaSerSerIleAspPheSerArgCysAsnMetAsp 96
Db         416 CTCCTGGACACCAACCAGCTGGATGCCAATTGTATCCCTTTCCAAGAGTTCGACATCAAC 475

Qy          97 GlyAlaThrLeuCysSerCysAlaLeuGluGluLeuArgLeuValPheGlyProLeuGly 116
Db         476 GGCGAGCACCTCTGCAGCATGAGTTTGCAGGAGTTCACCCGGGCGGCAGGGACGGCGGGG 535

Qy         117 AspGlnLeuHisAlaGlnLeuArgAspLeuThrSerAsn---------SerSerAspGlu 133
Db         536 CAGCTCCTCTACAGCAACTTGCAGCATCTGAAGTGGAACGGCCAGTGCAGTAGTGAC--- 592

Qy         134 LeuSerTrpIleIleGluLeuLeuGluLysAspGlyMetSerPheGlnGluSerLeuGly 153
Db         593 ------------------------------------CTGTTCCAGTCCACACACAAT 613

Qy         154 AspLeuGlyProPheAspGlnGlySerProPheAlaGlnGluLeuLeuAspAspGlyArg 173
Db         614 GTCATTGTCAAGACTGAACAAACTGAGCCT---------TCCATCATGAACACCTGGAAA 664
```

```
Qy        174 GlnAlaSerProTyrTyrCysSerThrTyrGlyProGlyAlaProSerProGlySerSer 193
Db        665 GACGAGAACTATTTATATGACACCAACTATGGT-------------------------- 697

Qy        194 AspValSerThrAlaArgThrAlaThrProGlnSerSerHisAlaSerAspSerGlyGly 213
Db        698 ------AGCACA---------------------------------------------- 703

Qy        214 SerAspValAspLeuAspLeuThrGluSerLysValProArgAspAspPhe------ 231
Db        704 ------------GTAGATTTGTTGGACAGCAAAACTTTCTGCCGGGCTCAGATCTCCATG 751

Qy        232 ---------ThrAspTyrLysLysGlyGluProLysHisGlyLysArgLysArgGlyArg 248
Db        752 ACAACCACCAGTCACCTTCCTGTTGCAGAGTCACCTGATATGAAAAAGGAGCAAGACCCC 811

Qy        249 ProArgLysLeuSerLysGluTyrTrpAspCysLeuGluGlyLysLysSerLysHisAla 268
Db        812 CCTGCCAAGTGCCACACCAAA---------------------------AAGCACAAC 841

Qy        269 ProArgGlyThrHisLeuTrpGluPheIleArgAspIleLeuIleHisProGluLeuAsn 288
Db        842 CCGAGAGGGACTCACTTATGGGAATTCATCCGCGACATCCTCTTGAACCCAGACAAGAAC 901

Qy        289 GluGlyLeuMetLysTrpGluAsnArgHisGluGlyValPheLysPheLeuArgSerGlu 308
Db        902 CCAGGATTAATAAAATGGGAAGACCGATCTGAGGGCGTCTTCAGGTTCTTGAAATCAGAG 961

Qy        309 AlaValAlaGlnLeuTrpGlyGlnLysLysLysAsnSerAsnMetThrTyrGluLysLeu 328
Db        962 GCAGTGGCTCAGCTATGGGGTAAAAAGAAGAACAACAGCAGCATGACCTATGAAAAGCTC 1021

Qy        329 SerArgAlaMetArgTyrTyrTyrLysArgGluIleLeuGluArgValAspGlyArgArg 348
Db       1022 AGCCGAGCTATGAGATATTACTACAAAAGAGAAATACTGGAGCGTGTGGATGGACGAAGA 1081

Qy        349 LeuValTyrLysPheGlyLysAsnSerSerGlyTrpLysGluGluGlu 364
Db       1082 CTGGTATATAAATTTGGGAAGAATGCCCGAGGATGGAGAGAAAATGAA 1129

RESULT 11
US-09-009-913-4
; Sequence 4, Application US/09009913
; Patent No. 6087485
;  GENERAL INFORMATION:
;    APPLICANT:  AxyS Pharmaceuticals, Inc.
;    TITLE OF INVENTION:  Asthma Related Genes
;    NUMBER OF SEQUENCES:  339
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Bozicevic & Reed, LLP
;      STREET:  285 Hamilton Ave, Suite 200
;      CITY:  Palo Alto
;      STATE:  CA
;      COUNTRY:  USA
;      ZIP:  94301
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Diskette
;      COMPUTER:  IBM Compatible
;      OPERATING SYSTEM:  DOS
;      SOFTWARE:  FastSEQ for Windows Version 2.0
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/009,913
;      FILING DATE:  21-JAN-1998
;      CLASSIFICATION:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:
;      FILING DATE:
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Sherwood, Pamela J
;      REGISTRATION NUMBER:  36,677
;      REFERENCE/DOCKET NUMBER:  SEQ-4P
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  650-327-3231
;      TELEFAX:  650-327-3231
;      TELEX:
;  INFORMATION FOR SEQ ID NO:  4:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  5667 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  double
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  cDNA
US-09-009-913-4

Alignment Scores:
Pred. No.:                2.17e-51      Length:          5667
Score:                    580.00        Matches:         129
Percent Similarity:       54.43%        Conservative:    43
Best Local Similarity:    40.82%        Mismatches:      78
Query Match:              29.29%        Indels:          66
DB:                       3             Gaps:            7

US-08-978-217-16_COPY_2_371 (1-370) x US-09-009-913-4 (1-5667)

Qy         57 TrpThrSerGluArgProGlnPheTrpSerLysThrGlnValLeuGluTrpIleSerTyr 76
Db        513 TGGCATGAAATTCATCCTCAGTACTGGACCAAGTACCAGGTGTGGGAGTGGCTCCAGCAC 572

Qy         77 GlnValGluLysAsnLysTyrAspAlaSerSerIleAspPheSerArgCysAsnMetAsp 96
Db        573 CTCCTGGACACCAACCAGCTGGATGCCAATTGTATCCCTTTCCAAGAGTTCGACATCAAC 632

Qy         97 GlyAlaThrLeuCysSerCysAlaLeuGluGluLeuArgLeuValPheGlyProLeuGly 116
Db        633 GGCGAGCACCTCTGCAGCATGAGTTTGCAGGAGTTCACCCGGGCGGCAGGGACGGCGGGG 692

Qy        117 AspGlnLeuHisAlaGlnLeuArgAspLeuThrSerAsn---------SerSerAspGlu 133
Db        693 CAGCTCCTCTACAGCAACTTGCAGCATCTGAAGTGGAACGGCCAGTGCAGTAGTGAC--- 749

Qy        134 LeuSerTrpIleIleGluLeuLeuGluLysAspGlyMetSerPheGlnGluSerLeuGly 153
Db        750 ------------------------------------CTGTTCCAGTCCACACACAAT 770

Qy        154 AspLeuGlyProPheAspGlnGlySerProPheAlaGlnGluLeuLeuAspAspGlyArg 173
Db        771 GTCATTGTCAAGACTGAACAAACTGAGCCT---------TCCATCATGAACACCTGGAAA 821

Qy        174 GlnAlaSerProTyrTyrCysSerThrTyrGlyProGlyAlaProSerProGlySerSer 193
Db        822 GACGAGAACTATTTATATGACACCAACTATGGT-------------------------- 854

Qy        194 AspValSerThrAlaArgThrAlaThrProGlnSerSerHisAlaSerAspSerGlyGly 213
Db        855 ------AGCACA---------------------------------------------- 860

Qy        214 SerAspValAspLeuAspLeuThrGluSerLysValProArgAspAspPhe------ 231
Db        861 ------------GTAGATTTGTTGGACAGCAAAACTTTCTGCCGGGCTCAGATCTCCATG 908

Qy        232 ---------ThrAspTyrLysLysGlyGluProLysHisGlyLysArgLysArgGlyArg 248
Db        909 ACAACCACCAGTCACCTTCCTGTTGCAGAGTCACCTGATATGAAAAAGGAGCAAGACCCC 968

Qy        249 ProArgLysLeuSerLysGluTyrTrpAspCysLeuGluGlyLysLysSerLysHisAla 268
Db        969 CCTGCCAAGTGCCACACCAAA---------------------------AAGCACAAC 998

Qy        269 ProArgGlyThrHisLeuTrpGluPheIleArgAspIleLeuIleHisProGluLeuAsn 288
Db        999 CCGAGAGGGACTCACTTATGGGAATTCATCCGCGACATCCTCTTGAACCCAGACAAGAAC 1058

Qy        289 GluGlyLeuMetLysTrpGluAsnArgHisGluGlyValPheLysPheLeuArgSerGlu 308
Db       1059 CCAGGATTAATAAAATGGGAAGACCGATCTGAGGGCGTCTTCAGGTTCTTGAAATCAGAG 1118
```

```
Qy        309 AlaValAlaGlnLeuTrpGlyGlnLysLysLysAsnSerAsnMetThrTyrGluLysLeu 328
Db       1119 GCAGTGGCTCAGCTATGGGGTAAAAAGAAGAACAACAGCAGCATGACCTATGAAAAGCTC 1178

Qy        329 SerArgAlaMetArgTyrTyrTyrLysArgGluIleLeuGluArgValAspGlyArgArg 348
Db       1179 AGCCGAGCTATGAGATATTACTACAAAAGAGAAATACTGGAGCGTGTGGATGGACGAAGA 1238

Qy        349 LeuValTyrLysPheGlyLysAsnSerSerGlyTrpLysGluGluGlu 364
Db       1239 CTGGTATATAAATTTGGGAAGAATGCCCGAGGATGGAGAGAAAATGAA 1286
```

RESULT 12
US-09-020-956-44/c
; Sequence 44, Application US/09020956
; Patent No. 6261562
; GENERAL INFORMATION:
; APPLICANT: Xu, Jiangchun
; APPLICANT: Dillin, Davin C.
; TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY OF PROSTATE CANCER AND METHODS FO
; NUMBER OF SEQUENCES: 178
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: SEED and BERRY LLP
; STREET: 6300 Columbia Center, 701 Fifth Avenue
; CITY: Seattle
; STATE: WA
; COUNTRY: USA
; ZIP: 98104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/020,956
; FILING DATE: 09-FEB-1998
; CLASSIFICATION:
; ATTORNEY/AGENT INFORMATION:
; NAME: Maki, David J.
; REGISTRATION NUMBER: 31,392
; REFERENCE/DOCKET NUMBER: 210121.427C2
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (206) 622-4900
; TELEFAX: (206) 682-6031
; INFORMATION FOR SEQ ID NO: 44:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 852 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: cDNA
; ORIGINAL SOURCE:
; ORGANISM: Homo sapiens
US-09-020-956-44

Alignment Scores:

Pred. No.:	1.06e-48	Length:	852
Score:	543.00	Matches:	124
Percent Similarity:	54.28%	Conservative:	41
Best Local Similarity:	40.79%	Mismatches:	73
Query Match:	27.42%	Indels:	66
DB:	3	Gaps:	7

US-08-978-217-16_COPY_2_371 (1-370) x US-09-020-956-44 (1-852)

```
Qy         69 GlnValLeuGluTrpIleSerTyrGlnValGluLysAsnLysTyrAspAlaSerSerIle 88
Db        850 CAGGTGTGGGAGTGGCTCCATCACCTCCTGGACACCAACCAGCTGGATGCCAATTGTATC 791

Qy         89 AspPheSerArgCysAsnMetAspGlyAlaThrLeuCysSerCysAlaLeuGluGluLeu 108
Db        790 CCTTTCCANGAGTTCGACATCAACGGCGAGCACCTTTGCAGCATGAGTTTGCAGGAGTTC 731

Qy        109 ArgLeuValPheGlyProLeuGlyAspGlnLeuHisAlaGlnLeuArgAspLeuThrSer 128
Db        730 ACCCGGGCGGCAGGGACGGCGGGGCANCTCCTCTACAGCAACTTGCAGCATCTGAAGTGG 671

Qy        129 Asn---------SerSerAspGluLeuSerTrpIleIleGluLeuLeuGluLysAspGly 145
Db        670 AACGGCCAGTGCAGTAGTGAC---------------------------------------- 650

Qy        146 MetSerPheGlnGluSerLeuGlyAspLeuGlyProPheAspGlnGlySerProPheAla 165
Db        649 ---CTGTTCCAGTCCACACACAATGTCATTGTCAAGACTGAACAAACTGAGCCT------ 599

Qy        166 GlnGluLeuLeuAspAspGlyArgGlnAlaSerProTyrTyrCysSerThrTyrGlyPro 185
Db        598 ---TCCATCATGAACACCTGGAAAGACNAGAACTATTTATATGACACCAACTATGGT--- 545

Qy        186 GlyAlaProSerProGlySerSerAspValSerThrAlaArgThrAlaThrProGlnSer 205
Db        544 ----------------------------AGCACA---------------------- 539

Qy        206 SerHisAlaSerAspSerGlyGlySerAspValAspLeuAspLeuThrGluSerLysVal 225
Db        538 ---------------------------------GTAGATTTGTTGGACAGCAAAACT 515

Qy        226 PheProArgAspAspPhe--------------ThrAspTyrLysLysGlyGluProLys 240
Db        514 TTCTGCCGGGCTCAGATCTCCATGACAACCACCAGTCACCTTCCTGTTGCAGAGTCACCT 455

Qy        241 HisGlyLysArgLysArgGlyArgProArgLysLeuSerLysGluTyrTrpAspCysLeu 260
Db        454 GATATGAAAAAGGAGCAAGACCCCCCTGCCAAGTGCCACACCAAA-------------- 410

Qy        261 GluGlyLysLysSerLysHisAlaProArgGlyThrHisLeuTrpGluPheIleArgAsp 280
Db        409 --------------AAGCACAACCCGAGAGGGACTCACTTATGGGAATTCATCCGCGAC 365

Qy        281 IleLeuIleHisProGluLeuAsnGluGlyLeuMetLysTrpGluAsnArgHisGluGly 300
Db        364 ATCCTCTTGAACCCAGACAAGAACCCAGGATTAATAAAATGGGAAGACCGATCTGAGGGC 305

Qy        301 ValPheLysPheLeuArgSerGluAlaValAlaGlnLeuTrpGlyGlnLysLysLysAsn 320
Db        304 GTCTTCAGGTTCTTGAAATCAGAGGCAGTGGCTCAGCTATGGGGTAAAAAGAAGAACAAC 245

Qy        321 SerAsnMetThrTyrGluLysLeuSerArgAlaMetArgTyrTyrTyrLysArgGluIle 340
Db        244 AGCAGCATGACCTATGAAAAGCTCAGCCGAGCTATGAGATATTACTACAAAAGAGAAATT 185

Qy        341 LeuGluArgValAspGlyArgArgLeuValTyrLysPheGlyLysAsnSerSerGlyTrp 360
Db        184 CTGGAGCGTGTGGATGGACGAAGACTGGTATATAAATTTGGGAAGAATGCCCGAGGATGG 125

Qy        361 LysGluGluGlu 364
Db        124 AGAGAAAATGAA 113
```

RESULT 13
US-09-030-607-44/c
; Sequence 44, Application US/09030607
; Patent No. 6262245
; GENERAL INFORMATION:
; APPLICANT: Xu, Jiangchun
; APPLICANT: Dillon, Davin C.
; TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY OF PROSTATE CANCER AND METHODS FO
; NUMBER OF SEQUENCES: 224
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: SEED and BERRY LLP
; STREET: 6300 Columbia Center, 701 Fifth Avenue
; CITY: Seattle
; STATE: WA
; COUNTRY: USA
; ZIP: 98104

```
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.30
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/030,607
;      FILING DATE:  25-FEB-1998
;      CLASSIFICATION:
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Maki, David J.
;      REGISTRATION NUMBER:  31,392
;      REFERENCE/DOCKET NUMBER:  210121.427C3
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (206) 622-4900
;      TELEFAX:  (206) 682-6031
;  INFORMATION FOR SEQ ID NO:  44:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  852 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  cDNA
;    ORIGINAL SOURCE:
;      ORGANISM:  Homo sapiens
US-09-030-607-44

Alignment Scores:
Pred. No.:              1.06e-48        Length:         852
Score:                  543.00          Matches:        124
Percent Similarity:     54.28%          Conservative:   41
Best Local Similarity:  40.79%          Mismatches:     73
Query Match:            27.42%          Indels:         66
DB:                     3               Gaps:           7

US-08-978-217-16_COPY_2_371 (1-370) x US-09-030-607-44 (1-852)

Qy         69 GlnValLeuGluTrpIleSerTyrGlnValGluLysAsnLysTyrAspAlaSerSerIle 88
              ||||||   ||||||:::   :::   ::::::   |||:::   |||||||:::   |||
Db        850 CAGGTGTGGGAGTGGCTCCATCACCTCCTGGACACCAACCAGCTGGATGCCAATTGTATC 791

Qy         89 AspPheSerArgCysAsnMetAspGlyAlaThrLeuCysSerCysAlaLeuGluGluLeu 108
                |||     ::::::::::|||      ||||||||  :::|||:::|||
Db        790 CCTTTCCANGAGTTCGACATCAACGGCGAGCACCTTTGCAGCATGAGTTTGCAGGAGTTC 731

Qy        109 ArgLeuValPheGlyProLeuGlyAspGlnLeuHisAlaGlnLeuArgAspLeuThrSer 128
                      |||      |||      |||::::::   |||:::   |||
Db        730 ACCCGGGCGGCAGGGACGGCGGGGCANCTCCTCTACAGCAACTTGCAGCATCTGAAGTGG 671

Qy        129 Asn---------SerSerAspGluLeuSerTrpIleIleGluLeuLeuGluLysAspGly 145
              |||         |||||||||
Db        670 AACGGCCAGTGCAGTAGTGAC------------------------------------ 650

Qy        146 MetSerPheGlnGluSerLeuGlyAspLeuGlyProPheAspGlnGlySerProPheAla 165
                    ||||||   :::         :::         :::|||      |||
Db        649 ---CTGTTCCAGTCCACACACAATGTCATTGTCAAGACTGAACAAACTGAGCCT------ 599

Qy        166 GlnGluLeuLeuAspAspGlyArgGlnAlaSerProTyrTyrCysSerThrTyrGlyPro 185
                  :::::::::     :::     :::         |||   :::   ||||||
Db        598 ---TCCATCATGAACACCTGGAAAGACNAGAACTATTTATATGACACCAACTATGGT--- 545

Qy        186 GlyAlaProSerProGlySerSerAspValSerThrAlaArgThrAlaThrProGlnSer 205
                                              ||||||
Db        544 ----------------------------AGCACA----------------------- 539

Qy        206 SerHisAlaSerAspSerGlyGlySerAspValAspLeuAspLeuThrGluSerLysVal 225
                                             :::||||||   :::||||||
Db        538 ----------------------------------GTAGATTTGTTGGACAGCAAAACT 515

Qy        226 PheProArgAspAspPhe--------------ThrAspTyrLysLysGlyGluProLys 240
              |||   |||                     :::                  |||
Db        514 TTCTGCCGGGCTCAGATCTCCATGACAACCACCAGTCACCTTCCTGTTGCAGAGTCACCT 455

Qy        241 HisGlyLysArgLysArgGlyArgProArgLysLeuSerLysGluTyrTrpAspCysLeu 260
                    |||::::::::     |||   |||         :::
Db        454 GATATGAAAAAGGAGCAAGACCCCCCTGCCAAGTGCCACACCAAA---------- 410

Qy        261 GluGlyLysLysSerLysHisAlaProArgGlyThrHisLeuTrpGluPheIleArgAsp 280
                          ||||||   ||||||||||||||||||||||||||||||||||||
Db        409 --------------AAGCACAACCCGAGAGGGACTCACTTATGGGAATTCATCCGCGAC 365

Qy        281 IleLeuIleHisProGluLeuAsnGluGlyLeuMetLysTrpGluAsnArgHisGluGly 300
              ||||||::::::|||:::   |||   ||||||:::||||||||:::|||   ||||||
Db        364 ATCCTCTTGAACCCAGACAAGAACCCAGGATTAATAAAATGGGAAGACCGATCTGAGGGC 305

Qy        301 ValPheLysPheLeuArgSerGluAlaValAlaGlnLeuTrpGlyGlnLysLysLysAsn 320
              ||||||:::||||||:::|||||||||||||||||||||||||||:::||||||   |||
Db        304 GTCTTCAGGTTCTTGAAATCAGAGGCAGTGGCTCAGCTATGGGGTAAAAAGAAGAACAAC 245

Qy        321 SerAsnMetThrTyrGluLysLeuSerArgAlaMetArgTyrTyrTyrLysArgGluIle 340
              |||:::|||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        244 AGCAGCATGACCTATGAAAAGCTCAGCCGAGCTATGAGATATTACTACAAAAGAGAAATT 185

Qy        341 LeuGluArgValAspGlyArgArgLeuValTyrLysPheGlyLysAsnSerSerGlyTrp 360
              ||||||||||||||||||||||||||||||||||||||||||||||:::   ||||||
Db        184 CTGGAGCGTGTGGATGGACGAAGACTGGTATATAAATTTGGGAAGAATGCCCGAGGATGG 125

Qy        361 LysGluGluGlu 364
              :::|||   |||
Db        124 AGAGAAAATGAA 113

RESULT 14
US-09-439-313-44/c
; Sequence 44, Application US/09439313
; Patent No. 6329505
; GENERAL INFORMATION:
;  APPLICANT: Xu, Jiangchun
;  APPLICANT:  Dillon, Davin C.
;  APPLICANT:  Mitcham, Jennifer L.
;  APPLICANT:  Harlocker, Susan Louise
;  APPLICANT:  Jiang Yuqui
;  APPLICANT:  Reed, Steven G.
;  APPLICANT:  Kalos, Michael
;  APPLICANT:  Fanger, Gary
;  APPLICANT:  Retter, Mark
;  APPLICANT:  Solk, John
;  APPLICANT:  Day, Craig
;  TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THERAPY AND
;  TITLE OF INVENTION:  DIAGNOSIS OF PROSTATE CANCER
;  FILE REFERENCE: 210121.427C9
;  CURRENT APPLICATION NUMBER: US/09/439,313
;  CURRENT FILING DATE:  1999-11-12
;  NUMBER OF SEQ ID NOS: 575
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 44
;   LENGTH: 852
;   TYPE: DNA
;   ORGANISM: Homo sapien
;   FEATURE:
;   NAME/KEY: misc_feature
;   LOCATION: (1)...(852)
;   OTHER INFORMATION: n = A,T,C or G
US-09-439-313-44

Alignment Scores:
Pred. No.:              1.06e-48        Length:         852
Score:                  543.00          Matches:        124
Percent Similarity:     54.28%          Conservative:   41
Best Local Similarity:  40.79%          Mismatches:     73
Query Match:            27.42%          Indels:         66
DB:                     4               Gaps:           7

US-08-978-217-16_COPY_2_371 (1-370) x US-09-439-313-44 (1-852)

Qy         69 GlnValLeuGluTrpIleSerTyrGlnValGluLysAsnLysTyrAspAlaSerSerIle 88
              ||||||   ||||||:::   :::   ::::::   |||:::   |||||||:::   |||
```

```
Db        850 CAGGTGTGGGAGTGGCTCCATCACCTCCTGGACACCAACCAGCTGGATGCCAATTGTATC 791

Qy         89 AspPheSerArgCysAsnMetAspGlyAlaThrLeuCysSerCysAlaLeuGluGluLeu 108

Db        790 CCTTTCCANGAGTTCGACATCAACGGCGAGCACCTTTGCAGCATGAGTTTGCAGGAGTTC 731

Qy        109 ArgLeuValPheGlyProLeuGlyAspGlnLeuHisAlaGlnLeuArgAspLeuThrSer 128

Db        730 ACCCGGGCGGCAGGGACGGCGGGGCANCTCCTCTACAGCAACTTGCAGCATCTGAAGTGG 671

Qy        129 Asn---------SerSerAspGluLeuSerTrpIleIleGluLeuLeuGluLysAspGly 145

Db        670 AACGGCCAGTGCAGTAGTGAC---------------------------------------- 650

Qy        146 MetSerPheGlnGluSerLeuGlyAspLeuGlyProPheAspGlnGlySerProPheAla 165

Db        649 ---CTGTTCCAGTCCACACACAATGTCATTGTCAAGACTGAACAAACTGAGCCT------ 599

Qy        166 GlnGluLeuLeuAspAspGlyArgGlnAlaSerProTyrTyrCysSerThrTyrGlyPro 185

Db        598 ---TCCATCATGAACACCTGGAAAGACNAGAACTATTTATATGACACCAACTATGGT--- 545

Qy        186 GlyAlaProSerProGlySerSerAspValSerThrAlaArgThrAlaThrProGlnSer 205

Db        544 ----------------------------AGCACA------------------------ 539

Qy        206 SerHisAlaSerAspSerGlyGlySerAspValAspLeuAspLeuThrGluSerLysVal 225

Db        538 ---------------------------------GTAGATTTGTTGGACAGCAAAACT 515

Qy        226 PheProArgAspAspPhe--------------ThrAspTyrLysLysGlyGluProLys 240

Db        514 TTCTGCCGGGCTCAGATCTCCATGACAACCACCAGTCACCTTCCTGTTGCAGAGTCACCT 455

Qy        241 HisGlyLysArgLysArgGlyArgProArgLysLeuSerLysGluTyrTrpAspCysLeu 260

Db        454 GATATGAAAAAGGAGCAAGACCCCCCTGCCAAGTGCCACACCAAA-------------- 410

Qy        261 GluGlyLysLysSerLysHisAlaProArgGlyThrHisLeuTrpGluPheIleArgAsp 280

Db        409 --------------AAGCACAACCCGAGAGGGACTCACTTATGGGAATTCATCCGCGAC 365

Qy        281 IleLeuIleHisProGluLeuAsnGluGlyLeuMetLysTrpGluAsnArgHisGluGly 300

Db        364 ATCCTCTTGAACCCAGACAAGAACCCAGGATTAATAAAATGGGAAGACCGATCTGAGGGC 305

Qy        301 ValPheLysPheLeuArgSerGluAlaValAlaGlnLeuTrpGlyGlnLysLysLysAsn 320

Db        304 GTCTTCAGGTTCTTGAAATCAGAGGCAGTGGCTCAGCTATGGGGTAAAAAGAAGAACAAC 245

Qy        321 SerAsnMetThrTyrGluLysLeuSerArgAlaMetArgTyrTyrTyrLysArgGluIle 340

Db        244 AGCAGCATGACCTATGAAAAGCTCAGCCGAGCTATGAGATATTACTACAAAAGAGAAATT 185

Qy        341 LeuGluArgValAspGlyArgArgLeuValTyrLysPheGlyLysAsnSerSerGlyTrp 360

Db        184 CTGGAGCGTGTGGATGGACGAAGACTGGTATATAAATTTGGGAAGAATGCCCGAGGATGG 125

Qy        361 LysGluGluGlu 364

Db        124 AGAGAAAATGAA 113
```

RESULT 15
US-09-352-616A-44/c
; Sequence 44, Application US/09352616A
; Patent No. 6395278
; GENERAL INFORMATION:
; APPLICANT: Dillon, Davin C.
; APPLICANT: Harlocker, Susan Louise
; APPLICANT: Jiang, Yuqui
; APPLICANT: Xu, Jiangchun
; APPLICANT: Mitcham, Jennifer Lynn
; TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY AND DIAGNOSIS
; TITLE OF INVENTION: OF PROSTATE CANCER AND METHODS FOR THEIR USE
; FILE REFERENCE: 210121.427C8
; CURRENT APPLICATION NUMBER: US/09/352,616A
; CURRENT FILING DATE: 1999-07-13
; NUMBER OF SEQ ID NOS: 472
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 44
; LENGTH: 852
; TYPE: DNA
; ORGANISM: Homo sapien
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (1)..(852)
; OTHER INFORMATION: n = A,T,C or G
US-09-352-616A-44

Alignment Scores:			
Pred. No.:	1.06e-48	Length:	852
Score:	543.00	Matches:	124
Percent Similarity:	54.28%	Conservative:	41
Best Local Similarity:	40.79%	Mismatches:	73
Query Match:	27.42%	Indels:	66
DB:	4	Gaps:	7

US-08-978-217-16_COPY_2_371 (1-370) x US-09-352-616A-44 (1-852)

```
Qy         69 GlnValLeuGluTrpIleSerTyrGlnValGluLysAsnLysTyrAspAlaSerSerIle 88

Db        850 CAGGTGTGGGAGTGGCTCCATCACCTCCTGGACACCAACCAGCTGGATGCCAATTGTATC 791

Qy         89 AspPheSerArgCysAsnMetAspGlyAlaThrLeuCysSerCysAlaLeuGluGluLeu 108

Db        790 CCTTTCCANGAGTTCGACATCAACGGCGAGCACCTTTGCAGCATGAGTTTGCAGGAGTTC 731

Qy        109 ArgLeuValPheGlyProLeuGlyAspGlnLeuHisAlaGlnLeuArgAspLeuThrSer 128

Db        730 ACCCGGGCGGCAGGGACGGCGGGGCANCTCCTCTACAGCAACTTGCAGCATCTGAAGTGG 671

Qy        129 Asn---------SerSerAspGluLeuSerTrpIleIleGluLeuLeuGluLysAspGly 145

Db        670 AACGGCCAGTGCAGTAGTGAC---------------------------------------- 650

Qy        146 MetSerPheGlnGluSerLeuGlyAspLeuGlyProPheAspGlnGlySerProPheAla 165

Db        649 ---CTGTTCCAGTCCACACACAATGTCATTGTCAAGACTGAACAAACTGAGCCT------ 599

Qy        166 GlnGluLeuLeuAspAspGlyArgGlnAlaSerProTyrTyrCysSerThrTyrGlyPro 185

Db        598 ---TCCATCATGAACACCTGGAAAGACNAGAACTATTTATATGACACCAACTATGGT--- 545

Qy        186 GlyAlaProSerProGlySerSerAspValSerThrAlaArgThrAlaThrProGlnSer 205

Db        544 ----------------------------AGCACA------------------------ 539

Qy        206 SerHisAlaSerAspSerGlyGlySerAspValAspLeuAspLeuThrGluSerLysVal 225

Db        538 ---------------------------------GTAGATTTGTTGGACAGCAAAACT 515

Qy        226 PheProArgAspAspPhe--------------ThrAspTyrLysLysGlyGluProLys 240

Db        514 TTCTGCCGGGCTCAGATCTCCATGACAACCACCAGTCACCTTCCTGTTGCAGAGTCACCT 455

Qy        241 HisGlyLysArgLysArgGlyArgProArgLysLeuSerLysGluTyrTrpAspCysLeu 260

Db        454 GATATGAAAAAGGAGCAAGACCCCCCTGCCAAGTGCCACACCAAA-------------- 410

Qy        261 GluGlyLysLysSerLysHisAlaProArgGlyThrHisLeuTrpGluPheIleArgAsp 280

Db        409 --------------AAGCACAACCCGAGAGGGACTCACTTATGGGAATTCATCCGCGAC 365

Qy        281 IleLeuIleHisProGluLeuAsnGluGlyLeuMetLysTrpGluAsnArgHisGluGly 300

Db        364 ATCCTCTTGAACCCAGACAAGAACCCAGGATTAATAAAATGGGAAGACCGATCTGAGGGC 305
```

```
Qy        301 ValPheLysPheLeuArgSerGluAlaValAlaGlnLeuTrpGlyGlnLysLysLysAsn 320
              ||||||:::||||||:::||||||||||||||||||||||||||:::||||||    |||
Db        304 GTCTTCAGGTTCTTGAAATCAGAGGCAGTGGCTCAGCTATGGGGTAAAAAGAAGAACAAC 245

Qy        321 SerAsnMetThrTyrGluLysLeuSerArgAlaMetArgTyrTyrTyrLysArgGluIle 340
              |||:::|||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        244 AGCAGCATGACCTATGAAAAGCTCAGCCGAGCTATGAGATATTACTACAAAAGAGAAATT 185

Qy        341 LeuGluArgValAspGlyArgArgLeuValTyrLysPheGlyLysAsnSerSerGlyTrp 360
              ||||||||||||||||||||||||||||||||||||||||||||:::   ||||||
Db        184 CTGGAGCGTGTGGATGGACGAAGACTGGTATATAAATTTGGGAAGAATGCCCGAGGATGG 125

Qy        361 LysGluGluGlu 364
              :::|||   |||
Db        124 AGAGAAAATGAA 113
```

Search completed: February 12, 2004, 21:50:15
Job time : 105.27 secs

GenCore version 5.1.6

OM nucleic - nucleic search, using sw model

Run on: February 12, 2004, 21:46:16 ; Search time 445.897 Seconds
(without alignments)
7673.534 Million cell updates/sec

Title: US-08-978-217-15
Perfect score: 7752
Sequence: 1 GGATCCTTCCAAGGCACTGA.....CAGAGGGGTCTCCTGGATCC 7752

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 569978 seqs, 220691566 residues

Total number of hits satisfying chosen parameters: 1139956

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Issued_Patents_NA:*
1: /cgn2_6/ptodata/1/ina/5A_COMB.seq:*
2: /cgn2_6/ptodata/1/ina/5B_COMB.seq:*
3: /cgn2_6/ptodata/1/ina/6A_COMB.seq:*
4: /cgn2_6/ptodata/1/ina/6B_COMB.seq:*
5: /cgn2_6/ptodata/1/ina/PCTUS_COMB.seq:*
6: /cgn2_6/ptodata/1/ina/backfiles1.seq:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

	Result No.	Score	% Query Match	Length	DB	ID	Description
	1	216	2.8	1907	4	US-09-300-958A-27	Sequence 27, Appl
	2	216	2.8	1907	4	US-09-570-593-4	Sequence 4, Appli
	3	215.6	2.8	1920	1	US-08-746-789A-1	Sequence 1, Appli
	4	163.8	2.1	502	4	US-09-389-681-282	Sequence 282, App
	5	163.8	2.1	502	4	US-09-620-405B-282	Sequence 282, App
	6	163.8	2.1	502	4	US-09-339-338-282	Sequence 282, App
	7	163.8	2.1	502	4	US-09-433-826B-282	Sequence 282, App
	8	163.8	2.1	502	4	US-09-604-287A-282	Sequence 282, App
	9	125.6	1.6	237	4	US-09-016-434-927	Sequence 927, App
	10	123.6	1.6	5973	3	US-09-245-041-4	Sequence 4, Appli
c	11	115.4	1.5	852	3	US-09-020-956-44	Sequence 44, Appl
c	12	115.4	1.5	852	3	US-09-030-607-44	Sequence 44, Appl
c	13	115.4	1.5	852	4	US-09-439-313-44	Sequence 44, Appl
c	14	115.4	1.5	852	4	US-09-352-616A-44	Sequence 44, Appl
c	15	115.4	1.5	852	4	US-09-232-149A-44	Sequence 44, Appl
	16	115.4	1.5	5427	3	US-09-009-913-2	Sequence 2, Appli
	17	115.4	1.5	5510	3	US-09-009-913-3	Sequence 3, Appli
	18	115.4	1.5	5667	3	US-09-009-913-4	Sequence 4, Appli
c	19	115.4	1.5	7208	3	US-09-166-186-107	Sequence 107, App
c	20	115.4	1.5	7208	3	US-09-313-932-107	Sequence 107, App
	21	114.8	1.5	2509	4	US-09-319-284-1	Sequence 1, Appli
c	22	114.4	1.5	14707	4	US-09-312-762A-3	Sequence 3, Appli
c	23	114.4	1.5	17056	3	US-09-245-041-3	Sequence 3, Appli
	24	112	1.4	51259	3	US-08-781-891-209	Sequence 209, App
	25	112	1.4	51259	4	US-09-618-166-209	Sequence 209, App
c	26	110.4	1.4	2411	3	US-09-188-930-75	Sequence 75, Appl
c	27	110.4	1.4	2411	3	US-09-188-930-256	Sequence 256, App
c	28	110.4	1.4	2411	4	US-09-312-283C-75	Sequence 75, Appl
c	29	110.4	1.4	2411	4	US-09-312-283C-256	Sequence 256, App
	30	109	1.4	17056	3	US-09-245-041-3	Sequence 3, Appli
c	31	108.2	1.4	2574	4	US-09-668-313A-10	Sequence 10, Appl
	32	108	1.4	30310	4	US-09-657-346A-96	Sequence 96, Appl
	33	107.6	1.4	90050	3	US-09-245-041-5	Sequence 5, Appli
	34	107.4	1.4	848	3	US-09-009-913-338	Sequence 338, App
c	35	107.4	1.4	90050	3	US-09-245-041-5	Sequence 5, Appli
	36	106.6	1.4	48974	3	US-08-920-422-17	Sequence 17, Appl
	37	106.4	1.4	5000	4	US-09-302-769-45	Sequence 45, Appl
c	38	106.4	1.4	6727	3	US-08-629-643A-5	Sequence 5, Appli
c	39	106.4	1.4	6727	3	US-09-280-799-1	Sequence 1, Appli
c	40	106.4	1.4	6727	3	US-09-155-884-5	Sequence 5, Appli
	41	106.4	1.4	35828	4	US-09-449-218D-17	Sequence 17, Appl
	42	106.4	1.4	35828	4	US-09-668-529A-17	Sequence 17, Appl
	43	106.4	1.4	35828	4	US-09-668-037A-17	Sequence 17, Appl
	44	106.2	1.4	4550	3	US-09-338-907-182	Sequence 182, App
	45	106.2	1.4	4550	4	US-09-218-207-182	Sequence 182, App

ALIGNMENTS

RESULT 1
US-09-300-958A-27
; Sequence 27, Application US/09300958A
; Patent No. 6495319
; GENERAL INFORMATION:
; APPLICANT: McClelland, Michael
; APPLICANT: Welsh, John
; APPLICANT: Trenkle, Thomas
; TITLE OF INVENTION: Reduced Complexity Nucleic Acid Targets and Methods of
; TITLE OF INVENTION: Using Same
; FILE REFERENCE: P-PH 3457
; CURRENT APPLICATION NUMBER: US/09/300,958A
; CURRENT FILING DATE: 1999-04-27
; PRIOR APPLICATION NUMBER: 60/083,331
; PRIOR FILING DATE: 1998-04-27
; PRIOR APPLICATION NUMBER: 60/098,070
; PRIOR FILING DATE: 1998-08-27
; PRIOR APPLICATION NUMBER: 60/118,624
; PRIOR FILING DATE: 1999-02-04
; NUMBER OF SEQ ID NOS: 85
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 27
; LENGTH: 1907
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-300-958A-27

Query Match 2.8%; Score 216; DB 4; Length 1907;
Best Local Similarity 66.7%; Pred. No. 2.3e-49;
Matches 456; Conservative 0; Mismatches 195; Indels 33; Gaps 9;

```
Qy       6999 AGGTATTACTACAAACGGGAGATCCTGGAACGGGTGGATGGCCGACGGCTCGTCTACAAG 7058
             ||||| |||||||||||||||||||||||||||||||||||||||| || ||||||||||||
Db       1095 AGGTACTACTACAAACGGGAGATCCTGGAACGGGTGGATGGCCGGCGACTCGTCTACAAG 1154

Qy       7059 TTTGGCAAGAACTCTAGTGGCTGGAAGGAAGAAGAGGTTGGAGAGAGTCGGAATTAAGGA 7118
             |||||||| ||||| || |||||||||||| |||||||||     |||||||||| | |||
Db       1155 TTTGGCAAAAACTCAAGCGGCTGGAAGGAGGAAGAGGTTCTCCAGAGTCGGAACTGAGGG 1214

Qy       7119 TCGGGGCTGGACCCAGGACCTGACTCAGGCATGAACTCCAGAACTGAAGCCTTCCTGGAA 7178
             | ||  ||  |||| |||||  ||||| | |  |       |      || |||||||||| |
Db       1215 TTGGAACTATACCCGGGACCAAACTCACGGACCACTCGAGGCCTGCAAACCTTCCTGGGA 1274

Qy       7179 GGACAGGCAGGCCTGACGGCCCCCTTAACATGGATGTGTTCCCTGTGTTGCTGTAGAGAG 7238
             |||||||||||||  ||  || |||||  ||  ||   || |||| |  |||||| |||||
Db       1275 GGACAGGCAGGCCAGATGG-CCCCTCCACTGGGGAATGCTCCCAGCTGTGCTGTGGAGAG 1333

Qy       7239 GAAGAACCTGTTGGGCGTGCCCTCTGC---AGTCTCCTCAAGTGCAGCCTTTGGCCTC-- 7293
                  || ||  ||   || ||    |||      |   | || || |||||||
Db       1334 AAGCTGATGTTTTGGTGTATTGTCAGCCATCGTCCTTGGACTCGGAGACTATGGCCTCGC 1393
```

```
Qy       7294 --TCTCCTCGCCCTCTTGGAATTACAAGCCCCGGGTTTGAACCAACTTGT---------- 7341
Db       1394 CTCCCCACCCTCCTCTTGGAATTACAAGCCCTGGGGTTTGAAGCTGACTTTATAGCTGCA 1453

Qy       7342 --TCGATAACTCTTCCAGCTGTGATTCCAGTTCCCTCCCGTCCCAACATGGACTGCAAAT 7399
Db       1454 AGTGTATCTCCTTTTATCTGGTGCCTCCTCAAACCCAGTCTCAGACACTTAAATGCAGAC 1513

Qy       7400 GAGAC---CCACCTGCAGATGCCTGGCCTCAGCCAAGGAGGCTGGGGAGACTGTGGCAGG 7456
Db       1514 AACACCTTCTTCCTGCAGACACTTGGACTGAGCCAAGGAGGCTTGGGAGGCCCT----AG 1569

Qy       7457 AGACTGCAGGGACGGAGGGGACAGGGTTGTGTCCTCGGTACTTC---CTGGACTGCCTTC 7513
Db       1570 GGAGCACCGTGATGGAGAGGACAGAGCAGGGGCTCCAGCACTTCTTTCTGGACTGGCGTT 1629

Qy       7514 CACCTCTTTGCTCAGTACTCAGGCTCCACAGACGGGGGTCGGATCA-TCCCTAATTTATG 7572
Db       1630 CACCTCCCTGCTCAGTGCTTGGGCTCCACGGGCAGGGGTCAGAGCACTCCCTAATTTATG 1689

Qy       7573 TGCTATA--AATATTCCAGGTGTATATAGAGAGCTATTTTTTCTAAAGCATTTCCCCTCC 7630
Db       1690 TGCTATATAAATATGTCAGATGTACATAGAGATCTATTTTTTCTAAAACATTCCCCTCCC 1749

Qy       7631 CTGCTCTTCTCCACTGAGTGCTGG 7654
Db       1750 CACTCCTCTCCCACAGAGTGCTGG 1773
```

RESULT 2
US-09-570-593-4
; Sequence 4, Application US/09570593
; Patent No. 6566063
; GENERAL INFORMATION:
; APPLICANT: Kaufmann, Joerg
; APPLICANT: Xin, Hong
; APPLICANT: Harrowe, Greg
; TITLE OF INVENTION: EXPRESSION OF ETS-DOMAIN PROTEINS IN
; TITLE OF INVENTION: CANCER
; FILE REFERENCE: 2300-1556
; CURRENT APPLICATION NUMBER: US/09/570,593
; CURRENT FILING DATE: 2000-05-12
; PRIOR APPLICATION NUMBER: 60/134,112
; PRIOR FILING DATE: 1999-05-14
; NUMBER OF SEQ ID NOS: 13
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 4
; LENGTH: 1907
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (96)...(1211)
; OTHER INFORMATION: Human epithelial-restricted with serine box (ESX)
; OTHER INFORMATION: protein.
US-09-570-593-4

Query Match 2.8%; Score 216; DB 4; Length 1907;
Best Local Similarity 66.7%; Pred. No. 2.3e-49;
Matches 456; Conservative 0; Mismatches 195; Indels 33; Gaps 9;

```
Qy       6999 AGGTATTACTACAAACGGGAGATCCTGGAACGGGTGGATGGCCGACGGCTCGTCTACAAG 7058
Db       1095 AGGTACTACTACAAACGGGAGATCCTGGAACGGGTGGATGGCCGGCGACTCGTCTACAAG 1154

Qy       7059 TTTGGCAAGAACTCTAGTGGCTGGAAGGAAGAAGAGGTTGGAGAGAGTCGGAATTAAGGA 7118
Db       1155 TTTGGCAAAAACTCAAGCGGCTGGAAGGAGGAAGAGGTTCTCCAGAGTCGGAACTGAGGG 1214

Qy       7119 TCGGGGCTGGACCCAGGACCTGACTCAGGCATGAACTCCAGAACTGAAGCCTTCCTGGAA 7178
Db       1215 TTGGAACTATACCCGGGACCAAACTCACGGACCACTCGAGGCCTGCAAACCTTCCTGGGA 1274
```

```
Qy       7179 GGACAGGCAGGCCTGACGGCCCCCTTAACATGGATGTGTTCCCTGTGTTGCTGTAGAGAG 7238
Db       1275 GGACAGGCAGGCCAGATGG-CCCCTCCACTGGGGAATGCTCCCAGCTGTGCTGTGGAGAG 1333

Qy       7239 GAAGAACCTGTTGGGCGTGCCCTCTGC---AGTCTCCTCAAGTGCAGCCTTTGGCCTC-- 7293
Db       1334 AAGCTGATGTTTTGGTGTATTGTCAGCCATCGTCCTTGGACTCGGAGACTATGGCCTCGC 1393

Qy       7294 --TCTCCTCGCCCTCTTGGAATTACAAGCCCCGGGTTTGAACCAACTTGT---------- 7341
Db       1394 CTCCCCACCCTCCTCTTGGAATTACAAGCCCTGGGGTTTGAAGCTGACTTTATAGCTGCA 1453

Qy       7342 --TCGATAACTCTTCCAGCTGTGATTCCAGTTCCCTCCCGTCCCAACATGGACTGCAAAT 7399
Db       1454 AGTGTATCTCCTTTTATCTGGTGCCTCCTCAAACCCAGTCTCAGACACTTAAATGCAGAC 1513

Qy       7400 GAGAC---CCACCTGCAGATGCCTGGCCTCAGCCAAGGAGGCTGGGGAGACTGTGGCAGG 7456
Db       1514 AACACCTTCTTCCTGCAGACACTTGGACTGAGCCAAGGAGGCTTGGGAGGCCCT----AG 1569

Qy       7457 AGACTGCAGGGACGGAGGGGACAGGGTTGTGTCCTCGGTACTTC---CTGGACTGCCTTC 7513
Db       1570 GGAGCACCGTGATGGAGAGGACAGAGCAGGGGCTCCAGCACTTCTTTCTGGACTGGCGTT 1629

Qy       7514 CACCTCTTTGCTCAGTACTCAGGCTCCACAGACGGGGGTCGGATCA-TCCCTAATTTATG 7572
Db       1630 CACCTCCCTGCTCAGTGCTTGGGCTCCACGGGCAGGGGTCAGAGCACTCCCTAATTTATG 1689

Qy       7573 TGCTATA--AATATTCCAGGTGTATATAGAGAGCTATTTTTTCTAAAGCATTTCCCCTCC 7630
Db       1690 TGCTATATAAATATGTCAGATGTACATAGAGATCTATTTTTTCTAAAACATTCCCCTCCC 1749

Qy       7631 CTGCTCTTCTCCACTGAGTGCTGG 7654
Db       1750 CACTCCTCTCCCACAGAGTGCTGG 1773
```

RESULT 3
US-08-746-789A-1
; Sequence 1, Application US/08746789A
; Patent No. 5789200
; GENERAL INFORMATION:
; APPLICANT: Ismail Kola, Martin J. Tymms, Christine DeBouck
; TITLE OF INVENTION: A No. 5789200el Human ETS Family Member, ELF3
; NUMBER OF SEQUENCES: 4
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: SmithKline Beecham Corporation
; STREET: 709 Swedeland Road, P.O. Box 1539
; CITY: King of Prussia
; STATE: PA
; COUNTRY: USA
; ZIP: 19406-0939
; COMPUTER READABLE FORM:
; MEDIUM TYPE: DISKETTE, 3.5 INCH, 1.44 Mb STORAGE
; COMPUTER: IBM 486
; OPERATING SYSTEM: WINDOWS FOR WORKGROUPS
; SOFTWARE: MICROSOFT WORD
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/746,789A
; FILING DATE: No. 5789200ember 15, 1996
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER:
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: William T. Han
; REGISTRATION NUMBER: 34,344
; REFERENCE/DOCKET NUMBER: ATG 50024
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 610 270 5219
; TELEFAX: 610 270 4026
; INFORMATION FOR SEQ ID NO: 1:

```
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  1920
;      TYPE:  Nucleic Acid
;      STRANDEDNESS:  Single
;      TOPOLOGY:  Linear
;    ANTI-SENSE:  No
US-08-746-789A-1

  Query Match             2.8%;  Score 215.6;  DB 1;  Length 1920;
  Best Local Similarity   65.6%;  Pred. No. 3e-49;
  Matches  449;  Conservative    0;  Mismatches  204;  Indels   31;  Gaps    8;

Qy       6999 AGGTATTACTACAAACGGGAGATCCTGGAACGGGTGGATGGCCGACGGCTCGTCTACAAG 7058
              ||||| ||||||||||||||||||||||||||||||||||||||||||| || ||||||||||||
Db       1114 AGGTACTACTACAAACGGGAGATCCTGGAACGGGTGGATGGCCGGCGACTCGTCTACAAG 1173

Qy       7059 TTTGGCAAGAAACTCTAGTGGCTGGAAGGAAGAAGAGGTTGGAGAGAGTCGGAATTAAGGA 7118
              |||||||| ||||| || |||||||||||| |||||||||     |||||||||| | |||
Db       1174 TTTGGCAAAAACTCAAGCGGCTGGAAGGAGGAAGAGGTTCTCCAGAGTCGGAACTGAGGG 1233

Qy       7119 TCGGGGCTGGACCCAGGACCTGACTCAGGCATGAACTCCAGAACTGAAGCCTTCCTGGAA 7178
              | ||  ||  |||| |||||  ||||| | |  |       |     || |||||||||| |
Db       1234 TTGGAACTATACCCGGGACCAAACTCACGGACCACTCGAGGCCTGCAAACCTTCCTGGGA 1293

Qy       7179 GGACAGGCAGGCCTGACGGCCCCCTTAACATGGATGTGTTCCCTGTGTTGCTGTAGAGAG 7238
              |||||||||||||  || || |||||  ||  ||  || |||| |   |||||| |||||
Db       1294 GGACAGGCAGGCCAGATGG-CCCCTCCACTGGGGAATGCTCCCAGCTGTGCTGTGGAGAG 1352

Qy       7239 GAAGAACCTGTTGGGCGTGCCCTCTGC---AGTCTCCTCAAGTGCAGCCTTTGGCCTC-- 7293
              |    ||  || ||  ||  ||     |   | || || |||||||
Db       1353 AAGCTGATGTTTTGGTGTATTGTCAGCCATCGTCCTGGGACTCGGAGACTATGGCCTCGC 1412

Qy       7294 --TCTCCTCGCCCTCTTGGAATTACAAGCCCCGGGTTTGAACCAACTTGTTCGA------ 7345
                | |  |  |||||||||||||||||||| ||| ||  |          ||  |
Db       1413 CTCCCCACCCTCCTCTTGGAATTACAAGCCCTGGGGTTTGAAGCTGACTTTATAGCTGCA 1472

Qy       7346 --------TAACTCTTCCAGCTGTGATTCCAGTTCCCTCCCGTCCCAACATGGACTGCAA 7397
                     |  | | | | ||      ||  ||  |     ||  |    | | |
Db       1473 AGTGTATCTCCTTTTATCTGGTGCCTCCTCAAACCCAGTCTCAGACACTAAATGCAGACA 1532

Qy       7398 ATGAGACCCACCTGCAGATGCCTGGCCTCAGCCAAGGAGGCTGGGGAGACTGTGGCAGGA 7457
              |      || |||||||  |||||| || ||||||||||||  |||     |     |||
Db       1533 ACACCTTCCTCCTGCAGACACCTGGACTGAGCCAAGGAGGCCTGGG--GAGGGCCTAGGG 1590

Qy       7458 GACTGCAGGGACGGAGGGGACAGGGTTGTGTCCTCGG----TACTTCCTGGACTGCCTTC 7513
              ||   | | || |||| |||||| |  | | |  | |    | ||| ||||||| | |
Db       1591 GAGCACCGTGATGGAGAGGACAGAGCAGGGGCTCCAGCACCTTCTTTCTGGACTGGCGTT 1650

Qy       7514 CACCTCTTTGCTCAGTACTCAGGCTCCACAGACGGGGGTCGGATCA-TCCCTAATTTATG 7572
              ||||||  |||||||| ||  |||||||| | | |||||| || || ||||||||||||||
Db       1651 CACCTCCCTGCTCAGTGCTTGGGCTCCACGGGCAGGGGTCAGAGCACTCCCTAATTTATG 1710

Qy       7573 TGC--TATAAATATTCCAGGTGTATATAGAGAGCTATTTTTTCTAAAGCATTTCCCCTCC 7630
              |||  |||||||||  ||| |||| ||||||| |||||||||||||| |||| |||  ||
Db       1711 TGCTATATAAATATGTCAGATGTACATAGAGATCTATTTTTTCTAAAACATTCCCCTCCC 1770

Qy       7631 CTGCTCTTCTCCACTGAGTGCTGG 7654
              |    ||   |||| |||||||||
Db       1771 CACTCCTCTCCCACAGAGTGCTGG 1794


RESULT 4
US-09-389-681-282
; Sequence 282, Application US/09389681A
; Patent No. 6518237
; GENERAL INFORMATION:
;  APPLICANT: Yuqui, Jiang
;  APPLICANT: Dillon, Davin C.
;  APPLICANT: Mitcham, Jennifer L.
;  APPLICANT: Xu, Jiangchun
;  TITLE OF INVENTION: COMPOSITIONS FOR THE TREATMENT AND
;  TITLE OF INVENTION: DIAGNOSIS OF BREAST CANCER AND METHODS FOR THEIR USE
;  FILE REFERENCE: 210121.470C3
;  CURRENT APPLICATION NUMBER: US/09/389,681A
;  CURRENT FILING DATE: 1999-09-02
;  NUMBER OF SEQ ID NOS: 463
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 282
;   LENGTH: 502
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-389-681-282

  Query Match             2.1%;  Score 163.8;  DB 4;  Length 502;
  Best Local Similarity   88.9%;  Pred. No. 2.9e-35;
  Matches  177;  Conservative    0;  Mismatches   22;  Indels    0;  Gaps    0;

Qy       6256 GCCCCCAGAGGTACTCACCTGTGGGAGTTTATCCGAGACATCCTAATCCACCCCGAGCTC 6315
              || |||||||| || |||||||||||||| ||||| |||||||| |||||||| ||||||
Db        258 GCGCCCAGAGGCACCCACCTGTGGGAGTTCATCCGGGACATCCTCATCCACCCGGAGCTC 317

Qy       6316 AACGAAGGCCTCATGAAGTGGGAGAACCGGCACGAGGGTGTGTTCAAGTTTCTTCGCTCA 6375
              ||||| |||||||||||||||||||| ||||| || || || |||||||| || |||||
Db        318 AACGAGGGCCTCATGAAGTGGGAGAATCGGCATGAAGGCGTCTTCAAGTTCCTGCGCTCC 377

Qy       6376 GAGGCCGTGGCCCAACTCTGGGGCCAGAAGAAGAAGAACAGCAACATGACCTATGAGAAG 6435
              ||||| |||||||||||| |||||||| ||||| ||||||||||||||||||||| ||||||
Db        378 GAGGCTGTGGCCCAACTATGGGGCCAAAAGAAAAAGAACAGCAACATGACCTACGAGAAG 437

Qy       6436 CTGAGCCGAGCCATGAGGT 6454
              |||||||| ||||||||||
Db        438 CTGAGCCGGGCCATGAGGT 456


RESULT 5
US-09-620-405B-282
; Sequence 282, Application US/09620405B
; Patent No. 6528054
; GENERAL INFORMATION:
;  APPLICANT: Jiang, Yuqiu
;  APPLICANT:  Dillon, Davin C.
;  APPLICANT:  Mitcham, Jennifer L.
;  APPLICANT:  Xu, Jiangchun
;  APPLICANT:  Harlocker, Susan L.
;  APPLICANT:  Hepler, William T.
;  TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY AND
;  TITLE OF INVENTION:  DIAGNOSIS OF BREAST CANCER
;  FILE REFERENCE: 210121.470CB
;  CURRENT APPLICATION NUMBER: US/09/620,405B
;  CURRENT FILING DATE:  2000-07-20
;  NUMBER OF SEQ ID NOS: 495
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 282
;   LENGTH: 502
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-620-405B-282

  Query Match             2.1%;  Score 163.8;  DB 4;  Length 502;
  Best Local Similarity   88.9%;  Pred. No. 2.9e-35;
  Matches  177;  Conservative    0;  Mismatches   22;  Indels    0;  Gaps    0;

Qy       6256 GCCCCCAGAGGTACTCACCTGTGGGAGTTTATCCGAGACATCCTAATCCACCCCGAGCTC 6315
              || |||||||| || |||||||||||||| ||||| |||||||| |||||||| ||||||
Db        258 GCGCCCAGAGGCACCCACCTGTGGGAGTTCATCCGGGACATCCTCATCCACCCGGAGCTC 317

Qy       6316 AACGAAGGCCTCATGAAGTGGGAGAACCGGCACGAGGGTGTGTTCAAGTTTCTTCGCTCA 6375
              ||||| |||||||||||||||||||| ||||| || || || |||||||| || |||||
Db        318 AACGAGGGCCTCATGAAGTGGGAGAATCGGCATGAAGGCGTCTTCAAGTTCCTGCGCTCC 377

Qy       6376 GAGGCCGTGGCCCAACTCTGGGGCCAGAAGAAGAAGAACAGCAACATGACCTATGAGAAG 6435
              ||||| |||||||||||| |||||||| ||||| ||||||||||||||||||||| ||||||
Db        378 GAGGCTGTGGCCCAACTATGGGGCCAAAAGAAAAAGAACAGCAACATGACCTACGAGAAG 437

Qy       6436 CTGAGCCGAGCCATGAGGT 6454
              |||||||| ||||||||||
```

```
Db        438 CTGAGCCGGGCCATGAGGT 456


RESULT 6
US-09-339-338-282
; Sequence 282, Application US/09339338A
; Patent No. 6573368
; GENERAL INFORMATION:
;  APPLICANT: Yuqiu, Jiang
;  APPLICANT: Dillon, Davin C.
;  APPLICANT: Mitcham, Jennifer L.
;  APPLICANT: Xu, Jiangchun
;  TITLE OF INVENTION: COMPOSITIONS FOR THE TREATMENT AND
;  TITLE OF INVENTION: DIAGNOSIS OF BREAST CANCER AND METHODS FOR THEIR USE
;  FILE REFERENCE: 210121.470C2
;  CURRENT APPLICATION NUMBER: US/09/339,338A
;  CURRENT FILING DATE: 1999-06-23
;  NUMBER OF SEQ ID NOS: 315
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 282
;   LENGTH: 502
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-339-338-282

  Query Match             2.1%;  Score 163.8;  DB 4;  Length 502;
  Best Local Similarity   88.9%;  Pred. No. 2.9e-35;
  Matches  177;  Conservative    0;  Mismatches   22;  Indels    0;  Gaps    0;

Qy       6256 GCCCCCAGAGGTACTCACCTGTGGGAGTTTATCCGAGACATCCTAATCCACCCCGAGCTC 6315
              || |||||||| || |||||||||||||| ||||| |||||||| |||||||| ||||||
Db        258 GCGCCCAGAGGCACCCACCTGTGGGAGTTCATCCGGGACATCCTCATCCACCCGGAGCTC 317

Qy       6316 AACGAAGGCCTCATGAAGTGGGAGAACCGGCACGAGGGTGTGTTCAAGTTTCTTCGCTCA 6375
              ||||| |||||||||||||||||||| ||||| || || || |||||||| || |||||
Db        318 AACGAGGGCCTCATGAAGTGGGAGAATCGGCATGAAGGCGTCTTCAAGTTCCTGCGCTCC 377

Qy       6376 GAGGCCGTGGCCCAACTCTGGGGCCAGAAGAAGAAGAACAGCAACATGACCTATGAGAAG 6435
              ||||| |||||||||||| |||||||| ||||| ||||||||||||||||||||| ||||||
Db        378 GAGGCTGTGGCCCAACTATGGGGCCAAAAGAAAAAGAACAGCAACATGACCTACGAGAAG 437

Qy       6436 CTGAGCCGAGCCATGAGGT 6454
              |||||||| ||||||||||
Db        438 CTGAGCCGGGCCATGAGGT 456


RESULT 7
US-09-433-826B-282
; Sequence 282, Application US/09433826B
; Patent No. 6579973
; GENERAL INFORMATION:
;  APPLICANT:  Jiang, Yuqui
;  APPLICANT:  Dillon, Davin C.
;  APPLICANT:  Mitcham, Jennifer L.
;  APPLICANT:  Xu, Jiangchun
;  APPLICANT:  Harlocker, Susan L.
;  TITLE OF INVENTION:  COMPOSITIONS FOR THE TREATMENT AND
;  TITLE OF INVENTION:  DIAGNOSIS OF BREAST CANCER AND METHODS FOR THEIR USE
;  FILE REFERENCE:  210121.470C4
;  CURRENT APPLICATION NUMBER: US/09/433,826B
;  CURRENT FILING DATE:  1999-11-03
;  NUMBER OF SEQ ID NOS:  474
;  SOFTWARE:  FastSEQ for Windows Version 3.0
; SEQ ID NO 282
;   LENGTH: 502
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-433-826B-282

  Query Match             2.1%;  Score 163.8;  DB 4;  Length 502;
  Best Local Similarity   88.9%;  Pred. No. 2.9e-35;
  Matches  177;  Conservative    0;  Mismatches   22;  Indels    0;  Gaps    0;

Qy       6256 GCCCCCAGAGGTACTCACCTGTGGGAGTTTATCCGAGACATCCTAATCCACCCCGAGCTC 6315
              || |||||||| || |||||||||||||| ||||| |||||||| |||||||| ||||||
Db        258 GCGCCCAGAGGCACCCACCTGTGGGAGTTCATCCGGGACATCCTCATCCACCCGGAGCTC 317

Qy       6316 AACGAAGGCCTCATGAAGTGGGAGAACCGGCACGAGGGTGTGTTCAAGTTTCTTCGCTCA 6375
              ||||| |||||||||||||||||||| ||||| || || || |||||||| || |||||
Db        318 AACGAGGGCCTCATGAAGTGGGAGAATCGGCATGAAGGCGTCTTCAAGTTCCTGCGCTCC 377

Qy       6376 GAGGCCGTGGCCCAACTCTGGGGCCAGAAGAAGAAGAACAGCAACATGACCTATGAGAAG 6435
              ||||| |||||||||||| |||||||| ||||| ||||||||||||||||||||| ||||||
Db        378 GAGGCTGTGGCCCAACTATGGGGCCAAAAGAAAAAGAACAGCAACATGACCTACGAGAAG 437

Qy       6436 CTGAGCCGAGCCATGAGGT 6454
              |||||||| ||||||||||
Db        438 CTGAGCCGGGCCATGAGGT 456


RESULT 8
US-09-604-287A-282
; Sequence 282, Application US/09604287A
; Patent No. 6586572
; GENERAL INFORMATION:
;  APPLICANT: Jiang, Yuqiu
;  APPLICANT:  Dillon, Davin C.
;  APPLICANT:  Mitcham, Jennifer L.
;  APPLICANT:  Xu, Jiangchun
;  APPLICANT:  Harlocker, Susan L.
;  APPLICANT:  Hepler, William T.
;  TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY AND
;  TITLE OF INVENTION:  DIAGNOSIS OF BREAST CANCER
;  FILE REFERENCE: 210121.470C7
;  CURRENT APPLICATION NUMBER: US/09/604,287A
;  CURRENT FILING DATE:  2000-06-22
;  NUMBER OF SEQ ID NOS: 489
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 282
;   LENGTH: 502
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-604-287A-282

  Query Match             2.1%;  Score 163.8;  DB 4;  Length 502;
  Best Local Similarity   88.9%;  Pred. No. 2.9e-35;
  Matches  177;  Conservative    0;  Mismatches   22;  Indels    0;  Gaps    0;

Qy       6256 GCCCCCAGAGGTACTCACCTGTGGGAGTTTATCCGAGACATCCTAATCCACCCCGAGCTC 6315
              || |||||||| || |||||||||||||| ||||| |||||||| |||||||| ||||||
Db        258 GCGCCCAGAGGCACCCACCTGTGGGAGTTCATCCGGGACATCCTCATCCACCCGGAGCTC 317

Qy       6316 AACGAAGGCCTCATGAAGTGGGAGAACCGGCACGAGGGTGTGTTCAAGTTTCTTCGCTCA 6375
              ||||| |||||||||||||||||||| ||||| || || || |||||||| || |||||
Db        318 AACGAGGGCCTCATGAAGTGGGAGAATCGGCATGAAGGCGTCTTCAAGTTCCTGCGCTCC 377

Qy       6376 GAGGCCGTGGCCCAACTCTGGGGCCAGAAGAAGAAGAACAGCAACATGACCTATGAGAAG 6435
              ||||| |||||||||||| |||||||| ||||| ||||||||||||||||||||| ||||||
Db        378 GAGGCTGTGGCCCAACTATGGGGCCAAAAGAAAAAGAACAGCAACATGACCTACGAGAAG 437

Qy       6436 CTGAGCCGAGCCATGAGGT 6454
              |||||||| ||||||||||
Db        438 CTGAGCCGGGCCATGAGGT 456


RESULT 9
US-09-016-434-927
; Sequence 927, Application US/09016434
; Patent No. 6500938
;  GENERAL INFORMATION:
;    APPLICANT:  Janice Au-Young
;    APPLICANT:  Jeffrey J. Seilhamer
;    TITLE OF INVENTION:  COMPOSITION FOR THE DETECTION OF SIGNALING
;    TITLE OF INVENTION:  PATHWAY GENE EXPRESSION
;    NUMBER OF SEQUENCES:  1490
;    CORRESPONDENCE ADDRESS:
```

```
;       ADDRESSEE:  INCYTE PHARMACEUTICALS, INC.
;       STREET:  3174 PORTER DRIVE
;       CITY:  PALO ALTO
;       STATE:  CALIFORNIA
;       COUNTRY:  USA
;       ZIP:  94304
;     COMPUTER READABLE FORM:
;       MEDIUM TYPE:  Floppy disk
;       COMPUTER:  IBM PC compatible
;       OPERATING SYSTEM:  PC-DOS/MS-DOS
;       SOFTWARE:  Word Perfect 6.1 for Windows/MS-DOS 6.2
;     CURRENT APPLICATION DATA:
;       APPLICATION NUMBER:  US/09/016,434
;       FILING DATE:  HEREWITH
;       CLASSIFICATION:
;     PRIOR APPLICATION DATA:
;       APPLICATION NUMBER:
;       FILING DATE:
;       CLASSIFICATION:
;     ATTORNEY/AGENT INFORMATION:
;       NAME:  Zeller, Karen J.
;       REGISTRATION NUMBER:  37,071
;       REFERENCE/DOCKET NUMBER:  PA-0002 US
;     TELECOMMUNICATION INFORMATION:
;       TELEPHONE:  (650) 855-0555
;       TELEFAX:  (650) 845-4166
;   INFORMATION FOR SEQ ID NO:  927:
;     SEQUENCE CHARACTERISTICS:
;       LENGTH:  237 base pairs
;       TYPE:  nucleic acid
;       STRANDEDNESS:  single
;       TOPOLOGY:  linear
;     IMMEDIATE SOURCE:
;       LIBRARY:  COLNCRT01
;       CLONE:  773734
US-09-016-434-927

  Query Match             1.6%;  Score 125.6;  DB 4;  Length 237;
  Best Local Similarity   79.3%;  Pred. No. 6.9e-25;
  Matches  149;  Conservative    0;  Mismatches   39;  Indels    0;  Gaps    0;

Qy       6999 AGGTATTACTACAAACGGGAGATCCTGGAACGGGTGGATGGCCGACGGCTCGTCTACAAG 7058
              ||||| ||||||||||||||||||||||||||||||||||||| || ||||||||||||
Db         50 AGGTACTACTACAAACGGGAGATCCTGGAACGGGTGGATGGCCGGCGACTCGTCTACAAG 109

Qy       7059 TTTGGCAAGAACTCTAGTGGCTGGAAGGAAGAAGAGGTTGGAGAGAGTCGGAATTAAGGA 7118
              |||||||| ||||| || |||||||||| |||||||||    |||||||||| | |||
Db        110 TTTGGCAAAAACTCAAGCGGCTGGAAGGAGGAAGAGGTTCTCCAGAGTCGGAACTGAGGG 169

Qy       7119 TCGGGGCTGGACCCAGGACCTGACTCAGGCATGAACTCCAGAACTGAAGCCTTCCTGGAA 7178
              | ||  ||  |||| ||||| |||| | |  |      |      || |||||||| |
Db        170 TTGGAACTATACCCGGGACCAAACTCACGGACCACTCGAGGCCTGCAAACCTTCCTGGGA 229

Qy       7179 GGACAGGC 7186
              ||||||||
Db        230 GGACAGGC 237


RESULT 10
US-09-245-041-4
; Sequence 4, Application US/09245041
; Patent No. 6274339
; GENERAL INFORMATION:
;  APPLICANT: Moore, K.
;  APPLICANT: Nagle, D.
;  TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR THE DIAGNOSIS AND TREATMENT
;  TITLE OF INVENTION: OF BODY WEIGHT DISORDERS INCLUDING OBESITY
;  FILE REFERENCE: 7853-136
;  CURRENT APPLICATION NUMBER: US/09/245,041
;  CURRENT FILING DATE: 1999-02-05
;  EARLIER APPLICATION NUMBER: 60/093,630
;  EARLIER FILING DATE: 1998-07-21
;  EARLIER APPLICATION NUMBER: 60/104,978
;  EARLIER FILING DATE: 1998-10-20
;  NUMBER OF SEQ ID NOS: 131
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 4
;   LENGTH: 5973
;   TYPE: DNA
;   ORGANISM: Mus musculus
US-09-245-041-4

  Query Match             1.6%;  Score 123.6;  DB 3;  Length 5973;
  Best Local Similarity   67.4%;  Pred. No. 2e-23;
  Matches  174;  Conservative    0;  Mismatches   84;  Indels    0;  Gaps    0;

Qy       1841 TTTGTTCTGTAGTTTTAGTTTTTCAAGACAGAGTTTCTCTGTGTAGCCCTGGCTGTCCTG 1900
              ||  ||  |  | |||  |||||||||||||| |||||||||| ||||||||||||||||
Db       5390 TTCTTTTTTCATTTTCGGTTTTTCAAGACAGGGTTTCTCTGTATAGCCCTGGCTGTCCTG 5449

Qy       1901 GAACTCACTCTGTAGACAAGGCTGGCCTCGAACTCAGAAATCCTTCTACCTCTACTTCAG 1960
              |||||||||||||||||| ||||||||||||||||||||||||    || ||||| | ||
Db       5450 GAACTCACTCTGTAGACCAGGCTGGCCTCGAACTCAGAAATCTGCCTGCCTCTGCCTCCC 5509

Qy       1961 GAGTGCTGGGATTAAAGATGTGCGCTGCCCTCCTCCACCCCAATTTGTTTTTGTTTTTTA 2020
              | |||||||||||||| |||| ||  ||  |  ||| ||  ||     |||| |  | | |
Db       5510 AAATGCTGGGATTAAAGGTGTGTGCCACCACCACCCAGCCTAAAAGATTTTCTTACTAAA 5569

Qy       2021 AGGGCCCCGGTAAACAGTAAATTAACATGTGCATCCTGTTTGTCTTTGTAATGACTCAAA 2080
              |          ||  | | | ||  || ||  || |  || | |||| ||  |  | ||
Db       5570 ATATATTTCTAAATTAATTAGTTGGAATCTGGTTCATACTTCTTTTTGAAACAAAACCAG 5629

Qy       2081 TGTTGGGCTTCTGACCAC 2098
              ||    |||   | ||
Db       5630 CATTTTTTTTCATTCTAC 5647


RESULT 11
US-09-020-956-44/c
; Sequence 44, Application US/09020956
; Patent No. 6261562
;  GENERAL INFORMATION:
;    APPLICANT:  Xu, Jiangchun
;    APPLICANT:  Dillin, Davin C.
;    TITLE OF INVENTION:  COMPOUNDS FOR IMMUNOTHERAPY OF PROSTATE CANCER AND METHODS FO
;    NUMBER OF SEQUENCES:  178
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  SEED and BERRY LLP
;      STREET:  6300 Columbia Center, 701 Fifth Avenue
;      CITY:  Seattle
;      STATE:  WA
;      COUNTRY:  USA
;      ZIP:  98104
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.30
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/020,956
;      FILING DATE:  09-FEB-1998
;      CLASSIFICATION:
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Maki, David J.
;      REGISTRATION NUMBER:  31,392
;      REFERENCE/DOCKET NUMBER:  210121.427C2
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (206) 622-4900
;      TELEFAX:  (206) 682-6031
;  INFORMATION FOR SEQ ID NO:  44:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  852 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  cDNA
```

```
;    ORIGINAL SOURCE:
;      ORGANISM:  Homo sapiens
US-09-020-956-44

  Query Match             1.5%;  Score 115.4;  DB 3;  Length 852;
  Best Local Similarity   74.1%;  Pred. No. 1.1e-21;
  Matches  146;  Conservative    0;  Mismatches   51;  Indels    0;  Gaps    0;

Qy       6258 CCCCAGAGGTACTCACCTGTGGGAGTTTATCCGAGACATCCTAATCCACCCCGAGCTCAA 6317
             ||| ||||| |||||| | ||||| || ||||| |||||||| |  |||| ||    ||
Db        401 CCCGAGAGGGACTCACTTATGGGAATTCATCCGCGACATCCTCTTGAACCCAGACAAGAA 342

Qy       6318 CGAAGGCCTCATGAAGTGGGAGAACCGGCACGAGGGTGTGTTCAAGTTTCTTCGCTCAGA 6377
             |  |||  | || || ||||| ||||     ||||| || |||| |||  |    |||||
Db        341 CCCAGGATTAATAAAATGGGAAGACCGATCTGAGGGCGTCTTCAGGTTCTTGAAATCAGA 282

Qy       6378 GGCCGTGGCCCAACTCTGGGGCCAGAAGAAGAAGAACAGCAACATGACCTATGAGAAGCT 6437
             ||| ||||| || || |||||  | |||||||| ||||||| ||||||||||||| |||||
Db        281 GGCAGTGGCTCAGCTATGGGGTAAAAAGAAGAACAACAGCAGCATGACCTATGAAAAGCT 222

Qy       6438 GAGCCGAGCCATGAGGT 6454
              |||||||| ||||| |
Db        221 CAGCCGAGCTATGAGAT 205


RESULT 12
US-09-030-607-44/c
; Sequence 44, Application US/09030607
; Patent No. 6262245
;  GENERAL INFORMATION:
;    APPLICANT:  Xu, Jiangchun
;    APPLICANT:  Dillon, Davin C.
;    TITLE OF INVENTION:  COMPOUNDS FOR IMMUNOTHERAPY OF PROSTATE CANCER AND METHODS FO
;    NUMBER OF SEQUENCES:  224
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  SEED and BERRY LLP
;      STREET:  6300 Columbia Center, 701 Fifth Avenue
;      CITY:  Seattle
;      STATE:  WA
;      COUNTRY:  USA
;      ZIP:  98104
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.30
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/030,607
;      FILING DATE:  25-FEB-1998
;      CLASSIFICATION:
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Maki, David J.
;      REGISTRATION NUMBER:  31,392
;      REFERENCE/DOCKET NUMBER:  210121.427C3
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (206) 622-4900
;      TELEFAX:  (206) 682-6031
;  INFORMATION FOR SEQ ID NO:  44:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  852 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  cDNA
;    ORIGINAL SOURCE:
;      ORGANISM:  Homo sapiens
US-09-030-607-44

  Query Match             1.5%;  Score 115.4;  DB 3;  Length 852;
  Best Local Similarity   74.1%;  Pred. No. 1.1e-21;
  Matches  146;  Conservative    0;  Mismatches   51;  Indels    0;  Gaps    0;

Qy       6258 CCCCAGAGGTACTCACCTGTGGGAGTTTATCCGAGACATCCTAATCCACCCCGAGCTCAA 6317
             ||| ||||| |||||| | ||||| || ||||| |||||||| |  |||| ||    ||
Db        401 CCCGAGAGGGACTCACTTATGGGAATTCATCCGCGACATCCTCTTGAACCCAGACAAGAA 342

Qy       6318 CGAAGGCCTCATGAAGTGGGAGAACCGGCACGAGGGTGTGTTCAAGTTTCTTCGCTCAGA 6377
             |  |||  | || || ||||| ||||     ||||| || |||| |||  |    |||||
Db        341 CCCAGGATTAATAAAATGGGAAGACCGATCTGAGGGCGTCTTCAGGTTCTTGAAATCAGA 282

Qy       6378 GGCCGTGGCCCAACTCTGGGGCCAGAAGAAGAAGAACAGCAACATGACCTATGAGAAGCT 6437
             ||| ||||| || || |||||  | |||||||| ||||||| ||||||||||||| |||||
Db        281 GGCAGTGGCTCAGCTATGGGGTAAAAAGAAGAACAACAGCAGCATGACCTATGAAAAGCT 222

Qy       6438 GAGCCGAGCCATGAGGT 6454
              |||||||| ||||| |
Db        221 CAGCCGAGCTATGAGAT 205


RESULT 13
US-09-439-313-44/c
; Sequence 44, Application US/09439313
; Patent No. 6329505
; GENERAL INFORMATION:
;  APPLICANT: Xu, Jiangchun
;  APPLICANT:  Dillon, Davin C.
;  APPLICANT:  Mitcham, Jennifer L.
;  APPLICANT:  Harlocker, Susan Louise
;  APPLICANT:  Jiang Yuqui
;  APPLICANT:  Reed, Steven G.
;  APPLICANT:  Kalos, Michael
;  APPLICANT:  Fanger, Gary
;  APPLICANT:  Retter, Mark
;  APPLICANT:  Solk, John
;  APPLICANT:  Day, Craig
;  TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THERAPY AND
;  TITLE OF INVENTION:  DIAGNOSIS OF PROSTATE CANCER
;  FILE REFERENCE: 210121.427C9
;  CURRENT APPLICATION NUMBER: US/09/439,313
;  CURRENT FILING DATE:  1999-11-12
;  NUMBER OF SEQ ID NOS: 575
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 44
;   LENGTH: 852
;   TYPE: DNA
;   ORGANISM: Homo sapien
;   FEATURE:
;   NAME/KEY: misc_feature
;   LOCATION: (1)...(852)
;   OTHER INFORMATION: n = A,T,C or G
US-09-439-313-44

  Query Match             1.5%;  Score 115.4;  DB 4;  Length 852;
  Best Local Similarity   74.1%;  Pred. No. 1.1e-21;
  Matches  146;  Conservative    0;  Mismatches   51;  Indels    0;  Gaps    0;

Qy       6258 CCCCAGAGGTACTCACCTGTGGGAGTTTATCCGAGACATCCTAATCCACCCCGAGCTCAA 6317
             ||| ||||| |||||| | ||||| || ||||| |||||||| |  |||| ||    ||
Db        401 CCCGAGAGGGACTCACTTATGGGAATTCATCCGCGACATCCTCTTGAACCCAGACAAGAA 342

Qy       6318 CGAAGGCCTCATGAAGTGGGAGAACCGGCACGAGGGTGTGTTCAAGTTTCTTCGCTCAGA 6377
             |  |||  | || || ||||| ||||     ||||| || |||| |||  |    |||||
Db        341 CCCAGGATTAATAAAATGGGAAGACCGATCTGAGGGCGTCTTCAGGTTCTTGAAATCAGA 282

Qy       6378 GGCCGTGGCCCAACTCTGGGGCCAGAAGAAGAAGAACAGCAACATGACCTATGAGAAGCT 6437
             ||| ||||| || || |||||  | |||||||| ||||||| ||||||||||||| |||||
Db        281 GGCAGTGGCTCAGCTATGGGGTAAAAAGAAGAACAACAGCAGCATGACCTATGAAAAGCT 222

Qy       6438 GAGCCGAGCCATGAGGT 6454
              |||||||| ||||| |
Db        221 CAGCCGAGCTATGAGAT 205


RESULT 14
US-09-352-616A-44/c
; Sequence 44, Application US/09352616A
```

```
; Patent No. 6395278
; GENERAL INFORMATION:
;  APPLICANT:  Dillon, Davin C.
;  APPLICANT:  Harlocker, Susan Louise
;  APPLICANT:  Jiang, Yuqui
;  APPLICANT:  Xu, Jiangchun
;  APPLICANT:  Mitcham, Jennifer Lynn
;  TITLE OF INVENTION:  COMPOUNDS FOR IMMUNOTHERAPY AND DIAGNOSIS
;  TITLE OF INVENTION:  OF PROSTATE CANCER AND METHODS FOR THEIR USE
;  FILE REFERENCE:  210121.427C8
;  CURRENT APPLICATION NUMBER: US/09/352,616A
;  CURRENT FILING DATE:  1999-07-13
;  NUMBER OF SEQ ID NOS:  472
;  SOFTWARE:  FastSEQ for Windows Version 3.0
; SEQ ID NO 44
;   LENGTH: 852
;   TYPE: DNA
;   ORGANISM: Homo sapien
;   FEATURE:
;   NAME/KEY: misc_feature
;   LOCATION: (1)...(852)
;   OTHER INFORMATION: n = A,T,C or G
US-09-352-616A-44

  Query Match             1.5%;  Score 115.4;  DB 4;  Length 852;
  Best Local Similarity   74.1%;  Pred. No. 1.1e-21;
  Matches  146;  Conservative    0;  Mismatches   51;  Indels    0;  Gaps    0;

Qy       6258 CCCCAGAGGTACTCACCTGTGGGAGTTTATCCGAGACATCCTAATCCACCCCGAGCTCAA 6317
             ||| ||||| |||||| | ||||| || ||||| |||||||| |  |||| ||    ||
Db        401 CCCGAGAGGGACTCACTTATGGGAATTCATCCGCGACATCCTCTTGAACCCAGACAAGAA 342

Qy       6318 CGAAGGCCTCATGAAGTGGGAGAACCGGCACGAGGGTGTGTTCAAGTTTCTTCGCTCAGA 6377
             |  |||  | || || |||||  ||||    ||||| || |||| |||  |    |||||
Db        341 CCCAGGATTAATAAAATGGGAAGACCGATCTGAGGGCGTCTTCAGGTTCTTGAAATCAGA 282

Qy       6378 GGCCGTGGCCCAACTCTGGGGCCAGAAGAAGAAGAACAGCAACATGACCTATGAGAAGCT 6437
             ||| ||||| || || |||||  | |||||||| ||||||| |||||||||||| |||||
Db        281 GGCAGTGGCTCAGCTATGGGGTAAAAAGAAGAACAACAGCAGCATGACCTATGAAAAGCT 222

Qy       6438 GAGCCGAGCCATGAGGT 6454
              |||||||| ||||| |
Db        221 CAGCCGAGCTATGAGAT 205


RESULT 15
US-09-232-149A-44/c
; Sequence 44, Application US/09232149A
; Patent No. 6465611
; GENERAL INFORMATION:
;  APPLICANT: Xu, Jiangchun
;  APPLICANT:  Dillon, Davin C.
;  APPLICANT:  Mitcham, Jennifer Lynn
;  TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY OF PROSTATE
;  TITLE OF INVENTION:  CANCER AND METHODS FOR THEIR USE
;  FILE REFERENCE: 210121.427C6
;  CURRENT APPLICATION NUMBER: US/09/232,149A
;  CURRENT FILING DATE:  1999-01-15
;  NUMBER OF SEQ ID NOS: 338
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 44
;   LENGTH: 852
;   TYPE: DNA
;   ORGANISM: Homo sapien
;   FEATURE:
;   NAME/KEY: misc_feature
;   LOCATION: (1)...(852)
;   OTHER INFORMATION: n = A,T,C or G
US-09-232-149A-44

  Query Match             1.5%;  Score 115.4;  DB 4;  Length 852;
  Best Local Similarity   74.1%;  Pred. No. 1.1e-21;
  Matches  146;  Conservative    0;  Mismatches   51;  Indels    0;  Gaps    0;

Qy       6258 CCCCAGAGGTACTCACCTGTGGGAGTTTATCCGAGACATCCTAATCCACCCCGAGCTCAA 6317
             ||| ||||| |||||| | ||||| || ||||| |||||||| |  |||| ||    ||
Db        401 CCCGAGAGGGACTCACTTATGGGAATTCATCCGCGACATCCTCTTGAACCCAGACAAGAA 342

Qy       6318 CGAAGGCCTCATGAAGTGGGAGAACCGGCACGAGGGTGTGTTCAAGTTTCTTCGCTCAGA 6377
             |  |||  | || || |||||  ||||    ||||| || |||| |||  |    |||||
Db        341 CCCAGGATTAATAAAATGGGAAGACCGATCTGAGGGCGTCTTCAGGTTCTTGAAATCAGA 282

Qy       6378 GGCCGTGGCCCAACTCTGGGGCCAGAAGAAGAAGAACAGCAACATGACCTATGAGAAGCT 6437
             ||| ||||| || || |||||  | |||||||| ||||||| |||||||||||| |||||
Db        281 GGCAGTGGCTCAGCTATGGGGTAAAAAGAAGAACAACAGCAGCATGACCTATGAAAAGCT 222

Qy       6438 GAGCCGAGCCATGAGGT 6454
              |||||||| ||||| |
Db        221 CAGCCGAGCTATGAGAT 205


Search completed: February 13, 2004, 01:55:04
Job time : 448.897 secs
```

GenCore version 5.1.6

OM nucleic - nucleic search, using sw model

Run on: February 12, 2004, 21:46:16 ; Search time 1.20792 Seconds
(without alignments)
7673.534 Million cell updates/sec

Title: US-08-978-217-14
Perfect score: 21
Sequence: 1 GTACCTCATGGCCCGGCTCAG 21

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 569978 seqs, 220691566 residues

Total number of hits satisfying chosen parameters: 1139956

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Issued_Patents_NA:*
1: /cgn2_6/ptodata/1/ina/5A_COMB.seq:*
2: /cgn2_6/ptodata/1/ina/5B_COMB.seq:*
3: /cgn2_6/ptodata/1/ina/6A_COMB.seq:*
4: /cgn2_6/ptodata/1/ina/6B_COMB.seq:*
5: /cgn2_6/ptodata/1/ina/PCTUS_COMB.seq:*
6: /cgn2_6/ptodata/1/ina/backfiles1.seq:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
c 1	21	100.0	237	4	US-09-016-434-927	Sequence 927, App
c 2	21	100.0	502	4	US-09-389-681-282	Sequence 282, App
c 3	21	100.0	502	4	US-09-620-405B-282	Sequence 282, App
c 4	21	100.0	502	4	US-09-339-338-282	Sequence 282, App
c 5	21	100.0	502	4	US-09-433-826B-282	Sequence 282, App
c 6	21	100.0	502	4	US-09-604-287A-282	Sequence 282, App
c 7	21	100.0	1907	4	US-09-300-958A-27	Sequence 27, Appl
c 8	21	100.0	1907	4	US-09-570-593-4	Sequence 4, Appli
c 9	21	100.0	1920	1	US-08-746-789A-1	Sequence 1, Appli
c 10	16.4	78.1	5499	3	US-08-479-722B-1	Sequence 1, Appli
c 11	16.4	78.1	5502	5	PCT-US95-02251-17	Sequence 17, Appl
c 12	16.2	77.1	2266	2	US-09-213-767-1	Sequence 1, Appli
13	16.2	77.1	4403765	3	US-09-103-840A-2	Sequence 2, Appli
c 14	16.2	77.1	4403765	3	US-09-103-840A-2	Sequence 2, Appli
15	16.2	77.1	4411529	3	US-09-103-840A-1	Sequence 1, Appli
c 16	16.2	77.1	4411529	3	US-09-103-840A-1	Sequence 1, Appli
17	15.8	75.2	671	3	US-09-129-030-29	Sequence 29, Appl
18	15.8	75.2	1479	4	US-08-868-373-3	Sequence 3, Appli
19	15.8	75.2	1533	4	US-09-522-217-88	Sequence 88, Appl
20	15.8	75.2	2224	4	US-09-221-017B-384	Sequence 384, App
21	15.8	75.2	2877	4	US-09-619-353-1	Sequence 1, Appli
22	15.8	75.2	3072	4	US-09-522-217-55	Sequence 55, Appl
c 23	15.4	73.3	1935	4	US-09-495-050A-190	Sequence 190, App
c 24	15.2	72.4	848	3	US-09-009-913-338	Sequence 338, App
c 25	15.2	72.4	856	4	US-09-535-008-55	Sequence 55, Appl
26	15.2	72.4	2218	4	US-09-350-457A-1	Sequence 1, Appli
c 27	15.2	72.4	2385	3	US-08-352-902D-145	Sequence 145, App
c 28	15.2	72.4	2484	2	US-08-209-521-8	Sequence 8, Appli
c 29	15.2	72.4	2484	3	US-08-961-810-4	Sequence 4, Appli
c 30	15.2	72.4	2484	3	US-08-352-902D-4	Sequence 4, Appli
c 31	15.2	72.4	2484	4	US-09-265-503B-4	Sequence 4, Appli
c 32	15.2	72.4	2484	4	US-09-708-200-16	Sequence 16, Appl
c 33	15.2	72.4	2525	4	US-08-294-312B-1	Sequence 1, Appli
c 34	15.2	72.4	2525	4	US-08-468-024B-1	Sequence 1, Appli
c 35	15.2	72.4	2525	4	US-08-187-757D-1	Sequence 1, Appli
c 36	15.2	72.4	2667	2	US-08-469-412A-1	Sequence 1, Appli
c 37	15.2	72.4	2667	3	US-09-021-715-1	Sequence 1, Appli
c 38	15.2	72.4	4953	4	US-09-620-312D-240	Sequence 240, App
c 39	15	71.4	827	3	US-09-333-599-5	Sequence 5, Appli
c 40	15	71.4	827	4	US-09-499-781-5	Sequence 5, Appli
c 41	15	71.4	870	3	US-09-333-599-1	Sequence 1, Appli
c 42	15	71.4	870	4	US-09-499-781-1	Sequence 1, Appli
43	14.8	70.5	778	3	US-08-998-416-220	Sequence 220, App
c 44	14.8	70.5	1021	3	US-09-095-117-5	Sequence 5, Appli
c 45	14.8	70.5	1030	3	US-09-095-117-7	Sequence 7, Appli

ALIGNMENTS

RESULT 1
US-09-016-434-927/c
; Sequence 927, Application US/09016434
; Patent No. 6500938
; GENERAL INFORMATION:
; APPLICANT: Janice Au-Young
; APPLICANT: Jeffrey J. Seilhamer
; TITLE OF INVENTION: COMPOSITION FOR THE DETECTION OF SIGNALING
; TITLE OF INVENTION: PATHWAY GENE EXPRESSION
; NUMBER OF SEQUENCES: 1490
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: INCYTE PHARMACEUTICALS, INC.
; STREET: 3174 PORTER DRIVE
; CITY: PALO ALTO
; STATE: CALIFORNIA
; COUNTRY: USA
; ZIP: 94304
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Word Perfect 6.1 for Windows/MS-DOS 6.2
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/016,434
; FILING DATE: HEREWITH
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER:
; FILING DATE:
; CLASSIFICATION:
; ATTORNEY/AGENT INFORMATION:
; NAME: Zeller, Karen J.
; REGISTRATION NUMBER: 37,071
; REFERENCE/DOCKET NUMBER: PA-0002 US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (650) 855-0555
; TELEFAX: (650) 845-4166
; INFORMATION FOR SEQ ID NO: 927:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 237 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; IMMEDIATE SOURCE:
; LIBRARY: COLNCRT01
; CLONE: 773734
US-09-016-434-927

Query Match 100.0%; Score 21; DB 4; Length 237;
Best Local Similarity 100.0%; Pred. No. 0.3;

```
  Matches   21;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 GTACCTCATGGCCCGGCTCAG 21
              |||||||||||||||||||||
Db         55 GTACCTCATGGCCCGGCTCAG 35


RESULT 2
US-09-389-681-282/c
; Sequence 282, Application US/09389681A
; Patent No. 6518237
; GENERAL INFORMATION:
;  APPLICANT: Yuqui, Jiang
;  APPLICANT: Dillon, Davin C.
;  APPLICANT: Mitcham, Jennifer L.
;  APPLICANT: Xu, Jiangchun
;  TITLE OF INVENTION: COMPOSITIONS FOR THE TREATMENT AND
;  TITLE OF INVENTION: DIAGNOSIS OF BREAST CANCER AND METHODS FOR THEIR USE
;  FILE REFERENCE: 210121.470C3
;  CURRENT APPLICATION NUMBER: US/09/389,681A
;  CURRENT FILING DATE: 1999-09-02
;  NUMBER OF SEQ ID NOS: 463
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 282
;   LENGTH: 502
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-389-681-282

  Query Match            100.0%;  Score 21;  DB 4;  Length 502;
  Best Local Similarity  100.0%;  Pred. No. 0.31;
  Matches   21;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 GTACCTCATGGCCCGGCTCAG 21
              |||||||||||||||||||||
Db        458 GTACCTCATGGCCCGGCTCAG 438


RESULT 3
US-09-620-405B-282/c
; Sequence 282, Application US/09620405B
; Patent No. 6528054
; GENERAL INFORMATION:
;  APPLICANT: Jiang, Yuqiu
;  APPLICANT:  Dillon, Davin C.
;  APPLICANT:  Mitcham, Jennifer L.
;  APPLICANT:  Xu, Jiangchun
;  APPLICANT:  Harlocker, Susan L.
;  APPLICANT:  Hepler, William T.
;  TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY AND
;  TITLE OF INVENTION:  DIAGNOSIS OF BREAST CANCER
;  FILE REFERENCE: 210121.470C8
;  CURRENT APPLICATION NUMBER: US/09/620,405B
;  CURRENT FILING DATE:  2000-07-20
;  NUMBER OF SEQ ID NOS: 495
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 282
;   LENGTH: 502
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-620-405B-282

  Query Match            100.0%;  Score 21;  DB 4;  Length 502;
  Best Local Similarity  100.0%;  Pred. No. 0.31;
  Matches   21;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 GTACCTCATGGCCCGGCTCAG 21
              |||||||||||||||||||||
Db        458 GTACCTCATGGCCCGGCTCAG 438


RESULT 4
US-09-339-338-282/c
; Sequence 282, Application US/09339338A
; Patent No. 6573368
; GENERAL INFORMATION:
;  APPLICANT: Yuqiu, Jiang
;  APPLICANT: Dillon, Davin C.
;  APPLICANT: Mitcham, Jennifer L.
;  APPLICANT: Xu, Jiangchun
;  TITLE OF INVENTION: COMPOSITIONS FOR THE TREATMENT AND
;  TITLE OF INVENTION: DIAGNOSIS OF BREAST CANCER AND METHODS FOR THEIR USE
;  FILE REFERENCE: 210121.470C2
;  CURRENT APPLICATION NUMBER: US/09/339,338A
;  CURRENT FILING DATE: 1999-06-23
;  NUMBER OF SEQ ID NOS: 315
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 282
;   LENGTH: 502
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-339-338-282

  Query Match            100.0%;  Score 21;  DB 4;  Length 502;
  Best Local Similarity  100.0%;  Pred. No. 0.31;
  Matches   21;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 GTACCTCATGGCCCGGCTCAG 21
              |||||||||||||||||||||
Db        458 GTACCTCATGGCCCGGCTCAG 438


RESULT 5
US-09-433-826B-282/c
; Sequence 282, Application US/09433826B
; Patent No. 6579973
; GENERAL INFORMATION:
;  APPLICANT:  Jiang, Yuqui
;  APPLICANT:  Dillon, Davin C.
;  APPLICANT:  Mitcham, Jennifer L.
;  APPLICANT:  Xu, Jiangchun
;  APPLICANT:  Harlocker, Susan L.
;  TITLE OF INVENTION:  COMPOSITIONS FOR THE TREATMENT AND
;  TITLE OF INVENTION:  DIAGNOSIS OF BREAST CANCER AND METHODS FOR THEIR USE
;  FILE REFERENCE:  210121.470C4
;  CURRENT APPLICATION NUMBER: US/09/433,826B
;  CURRENT FILING DATE:  1999-11-03
;  NUMBER OF SEQ ID NOS:  474
;  SOFTWARE:  FastSEQ for Windows Version 3.0
; SEQ ID NO 282
;   LENGTH: 502
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-433-826B-282

  Query Match            100.0%;  Score 21;  DB 4;  Length 502;
  Best Local Similarity  100.0%;  Pred. No. 0.31;
  Matches   21;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 GTACCTCATGGCCCGGCTCAG 21
              |||||||||||||||||||||
Db        458 GTACCTCATGGCCCGGCTCAG 438


RESULT 6
US-09-604-287A-282/c
; Sequence 282, Application US/09604287A
; Patent No. 6586572
; GENERAL INFORMATION:
;  APPLICANT: Jiang, Yuqiu
;  APPLICANT:  Dillon, Davin C.
;  APPLICANT:  Mitcham, Jennifer L.
;  APPLICANT:  Xu, Jiangchun
;  APPLICANT:  Harlocker, Susan L.
;  APPLICANT:  Hepler, William T.
;  TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY AND
```

```
;  TITLE OF INVENTION:  DIAGNOSIS OF BREAST CANCER
;  FILE REFERENCE: 210121.470C7
;  CURRENT APPLICATION NUMBER: US/09/604,287A
;  CURRENT FILING DATE:  2000-06-22
;  NUMBER OF SEQ ID NOS: 489
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 282
;   LENGTH: 502
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-604-287A-282

  Query Match             100.0%;  Score 21;  DB 4;  Length 502;
  Best Local Similarity   100.0%;  Pred. No. 0.31;
  Matches   21;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 GTACCTCATGGCCCGGCTCAG 21
              |||||||||||||||||||||
Db        458 GTACCTCATGGCCCGGCTCAG 438


RESULT 7
US-09-300-958A-27/c
; Sequence 27, Application US/09300958A
; Patent No. 6495319
; GENERAL INFORMATION:
;  APPLICANT:  McClelland, Michael
;  APPLICANT:  Welsh, John
;  APPLICANT:  Trenkle, Thomas
;  TITLE OF INVENTION:  Reduced Complexity Nucleic Acid Targets and Methods of
;  TITLE OF INVENTION:  Using Same
;  FILE REFERENCE:  P-PH 3457
;  CURRENT APPLICATION NUMBER: US/09/300,958A
;  CURRENT FILING DATE:  1999-04-27
;  PRIOR APPLICATION NUMBER:  60/083,331
;  PRIOR FILING DATE:  1998-04-27
;  PRIOR APPLICATION NUMBER:  60/098,070
;  PRIOR FILING DATE:  1998-08-27
;  PRIOR APPLICATION NUMBER:  60/118,624
;  PRIOR FILING DATE:  1999-02-04
;  NUMBER OF SEQ ID NOS:  85
;  SOFTWARE:  PatentIn Ver. 2.0
; SEQ ID NO 27
;   LENGTH: 1907
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-300-958A-27

  Query Match             100.0%;  Score 21;  DB 4;  Length 1907;
  Best Local Similarity   100.0%;  Pred. No. 0.33;
  Matches   21;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 GTACCTCATGGCCCGGCTCAG 21
              |||||||||||||||||||||
Db       1100 GTACCTCATGGCCCGGCTCAG 1080


RESULT 8
US-09-570-593-4/c
; Sequence 4, Application US/09570593
; Patent No. 6566063
; GENERAL INFORMATION:
;  APPLICANT:  Kaufmann, Joerg
;  APPLICANT:  Xin, Hong
;  APPLICANT:  Harrowe, Greg
;  TITLE OF INVENTION:  EXPRESSION OF ETS-DOMAIN PROTEINS IN
;  TITLE OF INVENTION:  CANCER
;  FILE REFERENCE:  2300-1556
;  CURRENT APPLICATION NUMBER: US/09/570,593
;  CURRENT FILING DATE:  2000-05-12
;  PRIOR APPLICATION NUMBER:  60/134,112
;  PRIOR FILING DATE:  1999-05-14
;  NUMBER OF SEQ ID NOS:  13
;  SOFTWARE:  FastSEQ for Windows Version 4.0
; SEQ ID NO 4
;   LENGTH: 1907
;   TYPE: DNA
;   ORGANISM: Homo sapiens
;   FEATURE:
;   NAME/KEY: CDS
;   LOCATION: (96)...(1211)
;   OTHER INFORMATION: Human epithelial-restricted with serine box (ESX)
;   OTHER INFORMATION: protein.
US-09-570-593-4

  Query Match             100.0%;  Score 21;  DB 4;  Length 1907;
  Best Local Similarity   100.0%;  Pred. No. 0.33;
  Matches   21;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 GTACCTCATGGCCCGGCTCAG 21
              |||||||||||||||||||||
Db       1100 GTACCTCATGGCCCGGCTCAG 1080


RESULT 9
US-08-746-789A-1/c
; Sequence 1, Application US/08746789A
; Patent No. 5789200
;  GENERAL INFORMATION:
;    APPLICANT:  Ismail Kola, Martin J. Tymms, Christine DeBouck
;    TITLE OF INVENTION:  A No. 5789200el Human ETS Family Member, ELF3
;    NUMBER OF SEQUENCES:  4
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  SmithKline Beecham Corporation
;      STREET:  709 Swedeland Road, P.O. Box 1539
;      CITY:  King of Prussia
;      STATE:  PA
;      COUNTRY:  USA
;      ZIP:  19406-0939
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  DISKETTE, 3.5 INCH, 1.44 Mb STORAGE
;      COMPUTER:  IBM 486
;      OPERATING SYSTEM:  WINDOWS FOR WORKGROUPS
;      SOFTWARE:  MICROSOFT WORD
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/746,789A
;      FILING DATE:  No. 5789200ember 15, 1996
;      CLASSIFICATION:  514
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:
;      FILING DATE:
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  William T. Han
;      REGISTRATION NUMBER:  34,344
;      REFERENCE/DOCKET NUMBER:  ATG 50024
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  610 270 5219
;      TELEFAX:  610 270 4026
;  INFORMATION FOR SEQ ID NO:  1:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  1920
;      TYPE:  Nucleic Acid
;      STRANDEDNESS:  Single
;      TOPOLOGY:  Linear
;    ANTI-SENSE:  No
US-08-746-789A-1

  Query Match             100.0%;  Score 21;  DB 1;  Length 1920;
  Best Local Similarity   100.0%;  Pred. No. 0.33;
  Matches   21;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 GTACCTCATGGCCCGGCTCAG 21
              |||||||||||||||||||||
Db       1119 GTACCTCATGGCCCGGCTCAG 1099
```

```
RESULT 10
US-08-479-722B-1/c
; Sequence 1, Application US/08479722B
; Patent No. 6074840
;  GENERAL INFORMATION:
;    APPLICANT:  Bonadio, Jeffrey
;    APPLICANT:  Yin, Wushan
;    TITLE OF INVENTION:  LATENT TGF( BINDING PROTEIN (LTBP)
;    TITLE OF INVENTION:  GENES, COMPOSITIONS AND METHODS
;    NUMBER OF SEQUENCES:  13
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Williams, Morgan & Amerson
;      STREET:  7676 Hillmont, Suite 250
;      CITY:  Houston
;      STATE:  Texas
;      COUNTRY:  USA
;      ZIP:  77040
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.30
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/479,722B
;      FILING DATE:  07-JUN-1995
;      CLASSIFICATION:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US PCT/US95/02251
;      FILING DATE:  21-FEB-1995
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 08/316,650
;      FILING DATE:  30-SEP-1994
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 08/199,780
;      FILING DATE:  18-FEB-1994
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Fussey, Shelley P.M.
;      REGISTRATION NUMBER:  39,458
;      REFERENCE/DOCKET NUMBER:  4100.000500/FUS
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (713) 934-7000
;      TELEFAX:  (713) 934-7011
;  INFORMATION FOR SEQ ID NO:  1:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  5499 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:
;      DESCRIPTION:  /desc = "DNA"
;    FEATURE:
;      NAME/KEY:  CDS
;      LOCATION:  1..5499
US-08-479-722B-1

  Query Match             78.1%;  Score 16.4;  DB 3;  Length 5499;
  Best Local Similarity   94.4%;  Pred. No. 49;
  Matches   17;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          3 ACCTCATGGCCCGGCTCA 20
              ||||||| ||||||||||
Db       3158 ACCTCATAGCCCGGCTCA 3141


RESULT 11
PCT-US95-02251-17/c
; Sequence 17, Application PC/TUS9502251
;  GENERAL INFORMATION:
;    APPLICANT:
;    TITLE OF INVENTION:  METHODS AND COMPOSITIONS FOR STIMULATING BONE
;    TITLE OF INVENTION:  CELLS
;    NUMBER OF SEQUENCES:  18
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Arnold, White & Durkee
;      STREET:  P.O. Box 4433
;      CITY:  Houston
;      STATE:  Texas
;      COUNTRY:  United States of America
;      ZIP:  77210
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS/ASCII
;      SOFTWARE:  PatentIn Release #1.0, Version
;      SOFTWARE:  #1.30
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  PCT/US95/02251
;      FILING DATE:  CONCURRENTLY HEREWITH
;      CLASSIFICATION:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 08/316,650
;      FILING DATE:  30-SEP-1994
;      CLASSIFICATION:
;      APPLICATION NUMBER:  US 08/199,780
;      FILING DATE:  18-FEB-1994
;      CLASSIFICATION:
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Parker, David L.
;      REGISTRATION NUMBER:  32,165
;      REFERENCE/DOCKET NUMBER:  UMIC009P--
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (512) 418-3000
;      TELEFAX:  (713) 789-2679
;      TELEX:  79-0924
;  INFORMATION FOR SEQ ID NO:  17:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  5502 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  other nucleic acid
;      DESCRIPTION:  /desc = "DNA"
;    FEATURE:
;      NAME/KEY:  CDS
;      LOCATION:  1..5502
PCT-US95-02251-17

  Query Match             78.1%;  Score 16.4;  DB 5;  Length 5502;
  Best Local Similarity   94.4%;  Pred. No. 49;
  Matches   17;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          3 ACCTCATGGCCCGGCTCA 20
              ||||||| ||||||||||
Db       3158 ACCTCATAGCCCGGCTCA 3141


RESULT 12
US-09-213-767-1/c
; Sequence 1, Application US/09213767
; Patent No. 5948680
; GENERAL INFORMATION:
;  APPLICANT: Brenda F. Baker
;  APPLICANT: Lex M. Cowsert
;  TITLE OF INVENTION: ANTISENSE MODULATION OF ELK-1 EXPRESSION
;  FILE REFERENCE: RTS-0024
;  CURRENT APPLICATION NUMBER: US/09/213,767
;  CURRENT FILING DATE: 1998-12-17
;  NUMBER OF SEQ ID NOS: 47
; SEQ ID NO 1
;   LENGTH: 2266
;   TYPE: DNA
;   ORGANISM: Homo sapiens
;   FEATURE:
;   NAME/KEY: CDS
;   LOCATION: (316)..(1602)
US-09-213-767-1
```

```
  Query Match             77.1%;  Score 16.2;  DB 2;  Length 2266;
  Best Local Similarity   85.7%;  Pred. No. 59;
  Matches   18;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy          1 GTACCTCATGGCCCGGCTCAG 21
              ||||| || |||||||||| ||
Db        513 GTACCGCAAGGCCCGGCTGAG 493


RESULT 13
US-09-103-840A-2
; Sequence 2, Application US/09103840A
; Patent No. 6294328
; GENERAL INFORMATION:
;  APPLICANT: FLEISCHMAN, Robert D.
;  APPLICANT:  WHITE, Owen R.
;  APPLICANT:  FRASER, Claire M.
;  APPLICANT:  VENTER, John C.
;  TITLE OF INVENTION: DNA SEQUENCES FOR STRAIN ANALYSIS IN MYCOBACTERIUM
;  TITLE OF INVENTION:  TUBERCULOSIS
;  FILE REFERENCE: 24366-20007.00
;  CURRENT APPLICATION NUMBER: US/09/103,840A
;  CURRENT FILING DATE:  1998-06-24
;  NUMBER OF SEQ ID NOS: 2
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 2
;   LENGTH: 4403765
;   TYPE: DNA
;   ORGANISM: Mycobacterium tuberculosis
;   FEATURE:
;   OTHER INFORMATION: CDC 1551
;   OTHER INFORMATION: "n" bases at various positions throughout the sequence
;   OTHER INFORMATION: represent a, t, c or g
US-09-103-840A-2

  Query Match             77.1%;  Score 16.2;  DB 3;  Length 4403765;
  Best Local Similarity   85.7%;  Pred. No. 54;
  Matches   18;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy          1 GTACCTCATGGCCCGGCTCAG 21
              | |||| |||||||||||| |
Db    4316894 GGACCTGATGGCCCGGCTCGG 4316914


RESULT 14
US-09-103-840A-2/c
; Sequence 2, Application US/09103840A
; Patent No. 6294328
; GENERAL INFORMATION:
;  APPLICANT: FLEISCHMAN, Robert D.
;  APPLICANT:  WHITE, Owen R.
;  APPLICANT:  FRASER, Claire M.
;  APPLICANT:  VENTER, John C.
;  TITLE OF INVENTION: DNA SEQUENCES FOR STRAIN ANALYSIS IN MYCOBACTERIUM
;  TITLE OF INVENTION:  TUBERCULOSIS
;  FILE REFERENCE: 24366-20007.00
;  CURRENT APPLICATION NUMBER: US/09/103,840A
;  CURRENT FILING DATE:  1998-06-24
;  NUMBER OF SEQ ID NOS: 2
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 2
;   LENGTH: 4403765
;   TYPE: DNA
;   ORGANISM: Mycobacterium tuberculosis
;   FEATURE:
;   OTHER INFORMATION: CDC 1551
;   OTHER INFORMATION: "n" bases at various positions throughout the sequence
;   OTHER INFORMATION: represent a, t, c or g
US-09-103-840A-2

  Query Match             77.1%;  Score 16.2;  DB 3;  Length 4403765;
  Best Local Similarity   85.7%;  Pred. No. 54;
  Matches   18;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy          1 GTACCTCATGGCCCGGCTCAG 21
              ||||||||||| | | ||||
Db    3052714 GTACCTCATGGCGCTGTTCAG 3052694


RESULT 15
US-09-103-840A-1
; Sequence 1, Application US/09103840A
; Patent No. 6294328
; GENERAL INFORMATION:
;  APPLICANT: FLEISCHMAN, Robert D.
;  APPLICANT:  WHITE, Owen R.
;  APPLICANT:  FRASER, Claire M.
;  APPLICANT:  VENTER, John C.
;  TITLE OF INVENTION: DNA SEQUENCES FOR STRAIN ANALYSIS IN MYCOBACTERIUM
;  TITLE OF INVENTION:  TUBERCULOSIS
;  FILE REFERENCE: 24366-20007.00
;  CURRENT APPLICATION NUMBER: US/09/103,840A
;  CURRENT FILING DATE:  1998-06-24
;  NUMBER OF SEQ ID NOS: 2
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 1
;   LENGTH: 4411529
;   TYPE: DNA
;   ORGANISM: Mycobacterium tuberculosis
;   OTHER INFORMATION: H37Rv
US-09-103-840A-1

  Query Match             77.1%;  Score 16.2;  DB 3;  Length 4411529;
  Best Local Similarity   85.7%;  Pred. No. 54;
  Matches   18;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy          1 GTACCTCATGGCCCGGCTCAG 21
              | |||| |||||||||||| |
Db    4324638 GGACCTGATGGCCCGGCTCGG 4324658


Search completed: February 13, 2004, 01:55:01
Job time : 20.2079 secs
```

GenCore version 5.1.6

OM nucleic - nucleic search, using sw model

Run on: February 12, 2004, 21:46:16 ; Search time 1.20792 Seconds
(without alignments)
7673.534 Million cell updates/sec

Title: US-08-978-217-13
Perfect score: 21
Sequence: 1 CCGGGACATCCTCATCCACCC 21

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 569978 seqs, 220691566 residues

Total number of hits satisfying chosen parameters: 1139956

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Issued_Patents_NA:*
1: /cgn2_6/ptodata/1/ina/5A_COMB.seq:*
2: /cgn2_6/ptodata/1/ina/5B_COMB.seq:*
3: /cgn2_6/ptodata/1/ina/6A_COMB.seq:*
4: /cgn2_6/ptodata/1/ina/6B_COMB.seq:*
5: /cgn2_6/ptodata/1/ina/PCTUS_COMB.seq:*
6: /cgn2_6/ptodata/1/ina/backfiles1.seq:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

	Result No.	Score	% Query Match	Length	DB	ID	Description
	1	21	100.0	502	4	US-09-389-681-282	Sequence 282, App
	2	21	100.0	502	4	US-09-620-405B-282	Sequence 282, App
	3	21	100.0	502	4	US-09-339-338-282	Sequence 282, App
	4	21	100.0	502	4	US-09-433-826B-282	Sequence 282, App
	5	21	100.0	502	4	US-09-604-287A-282	Sequence 282, App
	6	21	100.0	1907	4	US-09-300-958A-27	Sequence 27, Appl
	7	21	100.0	1907	4	US-09-570-593-4	Sequence 4, Appli
	8	21	100.0	1920	1	US-08-746-789A-1	Sequence 1, Appli
c	9	16.4	78.1	1086	4	US-09-328-352-99	Sequence 99, Appl
c	10	16.2	77.1	165	1	US-08-456-647B-1	Sequence 1, Appli
c	11	16.2	77.1	165	2	US-08-237-401A-1	Sequence 1, Appli
	12	16.2	77.1	361	4	US-09-643-597-303	Sequence 303, App
	13	16.2	77.1	361	4	US-09-480-884A-303	Sequence 303, App
	14	16.2	77.1	361	4	US-09-542-615A-303	Sequence 303, App
	15	16.2	77.1	361	4	US-09-606-421B-303	Sequence 303, App
	16	16.2	77.1	427	3	US-09-328-111-567	Sequence 567, App
c	17	16.2	77.1	1228	3	US-08-826-246-9	Sequence 9, Appli
c	18	16.2	77.1	1228	3	US-08-944-495-9	Sequence 9, Appli
c	19	16.2	77.1	1228	3	US-09-126-640-5	Sequence 5, Appli
c	20	16.2	77.1	1228	3	US-08-925-588-9	Sequence 9, Appli
c	21	16.2	77.1	1228	4	US-09-288-292A-5	Sequence 5, Appli
c	22	16.2	77.1	1228	4	US-09-372-044-9	Sequence 9, Appli
c	23	16.2	77.1	1228	4	US-08-825-486-9	Sequence 9, Appli
	24	15.8	75.2	718	3	US-08-998-416-682	Sequence 682, App
	25	15.8	75.2	1362	4	US-09-252-991A-10470	Sequence 10470, A
c	26	15.8	75.2	1626	4	US-09-252-991A-10598	Sequence 10598, A
	27	15.8	75.2	1684	4	US-09-620-312D-287	Sequence 287, App
	28	15.8	75.2	2190	4	US-09-252-991A-10256	Sequence 10256, A
	29	15.2	72.4	492	4	US-09-252-991A-880	Sequence 880, App
c	30	15.2	72.4	510	4	US-09-252-991A-4285	Sequence 4285, Ap
c	31	15.2	72.4	636	4	US-09-702-705-1668	Sequence 1668, Ap
c	32	15.2	72.4	636	4	US-09-736-457-1668	Sequence 1668, Ap
	33	15.2	72.4	1002	4	US-09-252-991A-11872	Sequence 11872, A
	34	15.2	72.4	1026	4	US-09-129-033-1	Sequence 1, Appli
	35	15.2	72.4	1068	4	US-09-252-991A-15054	Sequence 15054, A
c	36	15.2	72.4	1074	4	US-09-516-914-16	Sequence 16, Appl
c	37	15.2	72.4	1103	4	US-09-892-074-1	Sequence 1, Appli
	38	15.2	72.4	1281	4	US-09-252-991A-856	Sequence 856, App
	39	15.2	72.4	1320	2	US-08-461-775-8	Sequence 8, Appli
	40	15.2	72.4	1320	3	US-09-031-606-8	Sequence 8, Appli
c	41	15.2	72.4	1464	4	US-09-252-991A-11508	Sequence 11508, A
	42	15.2	72.4	1515	3	US-09-292-768-5	Sequence 5, Appli
c	43	15.2	72.4	1527	4	US-09-252-991A-815	Sequence 815, App
	44	15.2	72.4	1620	2	US-08-461-775-10	Sequence 10, Appl
	45	15.2	72.4	1620	3	US-09-031-606-10	Sequence 10, Appl

ALIGNMENTS

RESULT 1
US-09-389-681-282
; Sequence 282, Application US/09389681A
; Patent No. 6518237
; GENERAL INFORMATION:
; APPLICANT: Yuqui, Jiang
; APPLICANT: Dillon, Davin C.
; APPLICANT: Mitcham, Jennifer L.
; APPLICANT: Xu, Jiangchun
; TITLE OF INVENTION: COMPOSITIONS FOR THE TREATMENT AND
; TITLE OF INVENTION: DIAGNOSIS OF BREAST CANCER AND METHODS FOR THEIR USE
; FILE REFERENCE: 210121.470C3
; CURRENT APPLICATION NUMBER: US/09/389,681A
; CURRENT FILING DATE: 1999-09-02
; NUMBER OF SEQ ID NOS: 463
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 282
; LENGTH: 502
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-389-681-282

Query Match 100.0%; Score 21; DB 4; Length 502;
Best Local Similarity 100.0%; Pred. No. 0.92;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy          1 CCGGGACATCCTCATCCACCC 21
              |||||||||||||||||||||
Db        290 CCGGGACATCCTCATCCACCC 310
```

RESULT 2
US-09-620-405B-282
; Sequence 282, Application US/09620405B
; Patent No. 6528054
; GENERAL INFORMATION:
; APPLICANT: Jiang, Yuqiu
; APPLICANT: Dillon, Davin C.
; APPLICANT: Mitcham, Jennifer L.
; APPLICANT: Xu, Jiangchun
; APPLICANT: Harlocker, Susan L.
; APPLICANT: Hepler, William T.
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY AND
; TITLE OF INVENTION: DIAGNOSIS OF BREAST CANCER
; FILE REFERENCE: 210121.470C8
; CURRENT APPLICATION NUMBER: US/09/620,405B
; CURRENT FILING DATE: 2000-07-20
; NUMBER OF SEQ ID NOS: 495
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 282

```
;   LENGTH: 502
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-620-405B-282

  Query Match             100.0%;  Score 21;  DB 4;  Length 502;
  Best Local Similarity   100.0%;  Pred. No. 0.92;
  Matches   21;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 CCGGGACATCCTCATCCACCC 21
              |||||||||||||||||||||
Db        290 CCGGGACATCCTCATCCACCC 310


RESULT 3
US-09-339-338-282
; Sequence 282, Application US/09339338A
; Patent No. 6573368
; GENERAL INFORMATION:
;  APPLICANT: Yuqiu, Jiang
;  APPLICANT: Dillon, Davin C.
;  APPLICANT: Mitcham, Jennifer L.
;  APPLICANT: Xu, Jiangchun
;  TITLE OF INVENTION: COMPOSITIONS FOR THE TREATMENT AND
;  TITLE OF INVENTION: DIAGNOSIS OF BREAST CANCER AND METHODS FOR THEIR USE
;  FILE REFERENCE: 210121.470C2
;  CURRENT APPLICATION NUMBER: US/09/339,338A
;  CURRENT FILING DATE: 1999-06-23
;  NUMBER OF SEQ ID NOS: 315
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 282
;   LENGTH: 502
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-339-338-282

  Query Match             100.0%;  Score 21;  DB 4;  Length 502;
  Best Local Similarity   100.0%;  Pred. No. 0.92;
  Matches   21;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 CCGGGACATCCTCATCCACCC 21
              |||||||||||||||||||||
Db        290 CCGGGACATCCTCATCCACCC 310


RESULT 4
US-09-433-826B-282
; Sequence 282, Application US/09433826B
; Patent No. 6579973
; GENERAL INFORMATION:
;  APPLICANT:  Jiang, Yuqui
;  APPLICANT:  Dillon, Davin C.
;  APPLICANT:  Mitcham, Jennifer L.
;  APPLICANT:  Xu, Jiangchun
;  APPLICANT:  Harlocker, Susan L.
;  TITLE OF INVENTION:  COMPOSITIONS FOR THE TREATMENT AND
;  TITLE OF INVENTION:  DIAGNOSIS OF BREAST CANCER AND METHODS FOR THEIR USE
;  FILE REFERENCE:  210121.470C4
;  CURRENT APPLICATION NUMBER: US/09/433,826B
;  CURRENT FILING DATE:  1999-11-03
;  NUMBER OF SEQ ID NOS:  474
;  SOFTWARE:  FastSEQ for Windows Version 3.0
; SEQ ID NO 282
;   LENGTH: 502
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-433-826B-282

  Query Match             100.0%;  Score 21;  DB 4;  Length 502;
  Best Local Similarity   100.0%;  Pred. No. 0.92;
  Matches   21;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 CCGGGACATCCTCATCCACCC 21
              |||||||||||||||||||||
Db        290 CCGGGACATCCTCATCCACCC 310


RESULT 5
US-09-604-287A-282
; Sequence 282, Application US/09604287A
; Patent No. 6586572
; GENERAL INFORMATION:
;  APPLICANT: Jiang, Yuqiu
;  APPLICANT:  Dillon, Davin C.
;  APPLICANT:  Mitcham, Jennifer L.
;  APPLICANT:  Xu, Jiangchun
;  APPLICANT:  Harlocker, Susan L.
;  APPLICANT:  Hepler, William T.
;  TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY AND
;  TITLE OF INVENTION:  DIAGNOSIS OF BREAST CANCER
;  FILE REFERENCE: 210121.470C7
;  CURRENT APPLICATION NUMBER: US/09/604,287A
;  CURRENT FILING DATE:  2000-06-22
;  NUMBER OF SEQ ID NOS: 489
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 282
;   LENGTH: 502
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-604-287A-282

  Query Match             100.0%;  Score 21;  DB 4;  Length 502;
  Best Local Similarity   100.0%;  Pred. No. 0.92;
  Matches   21;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 CCGGGACATCCTCATCCACCC 21
              |||||||||||||||||||||
Db        290 CCGGGACATCCTCATCCACCC 310


RESULT 6
US-09-300-958A-27
; Sequence 27, Application US/09300958A
; Patent No. 6495319
; GENERAL INFORMATION:
;  APPLICANT:  McClelland, Michael
;  APPLICANT:  Welsh, John
;  APPLICANT:  Trenkle, Thomas
;  TITLE OF INVENTION:  Reduced Complexity Nucleic Acid Targets and Methods of
;  TITLE OF INVENTION:  Using Same
;  FILE REFERENCE:  P-PH 3457
;  CURRENT APPLICATION NUMBER: US/09/300,958A
;  CURRENT FILING DATE:  1999-04-27
;  PRIOR APPLICATION NUMBER:  60/083,331
;  PRIOR FILING DATE:  1998-04-27
;  PRIOR APPLICATION NUMBER:  60/098,070
;  PRIOR FILING DATE:  1998-08-27
;  PRIOR APPLICATION NUMBER:  60/118,624
;  PRIOR FILING DATE:  1999-02-04
;  NUMBER OF SEQ ID NOS:  85
;  SOFTWARE:  PatentIn Ver. 2.0
; SEQ ID NO 27
;   LENGTH: 1907
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-300-958A-27

  Query Match             100.0%;  Score 21;  DB 4;  Length 1907;
  Best Local Similarity   100.0%;  Pred. No. 1;
  Matches   21;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 CCGGGACATCCTCATCCACCC 21
              |||||||||||||||||||||
Db        932 CCGGGACATCCTCATCCACCC 952
```

```
RESULT 7
US-09-570-593-4
; Sequence 4, Application US/09570593
; Patent No. 6566063
; GENERAL INFORMATION:
;  APPLICANT:  Kaufmann, Joerg
;  APPLICANT:  Xin, Hong
;  APPLICANT:  Harrowe, Greg
;  TITLE OF INVENTION:  EXPRESSION OF ETS-DOMAIN PROTEINS IN
;  TITLE OF INVENTION:  CANCER
;  FILE REFERENCE:  2300-1556
;  CURRENT APPLICATION NUMBER: US/09/570,593
;  CURRENT FILING DATE:  2000-05-12
;  PRIOR APPLICATION NUMBER:  60/134,112
;  PRIOR FILING DATE:  1999-05-14
;  NUMBER OF SEQ ID NOS:  13
;  SOFTWARE:  FastSEQ for Windows Version 4.0
; SEQ ID NO 4
;    LENGTH: 1907
;    TYPE: DNA
;    ORGANISM: Homo sapiens
;    FEATURE:
;    NAME/KEY: CDS
;    LOCATION: (96)...(1211)
;    OTHER INFORMATION: Human epithelial-restricted with serine box (ESX)
;    OTHER INFORMATION: protein.
US-09-570-593-4

  Query Match             100.0%;  Score 21;  DB 4;  Length 1907;
  Best Local Similarity   100.0%;  Pred. No. 1;
  Matches   21;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 CCGGGACATCCTCATCCACCC 21
              |||||||||||||||||||||
Db        932 CCGGGACATCCTCATCCACCC 952


RESULT 8
US-08-746-789A-1
; Sequence 1, Application US/08746789A
; Patent No. 5789200
;  GENERAL INFORMATION:
;    APPLICANT:  Ismail Kola, Martin J. Tymms, Christine DeBouck
;    TITLE OF INVENTION:  A No. 5789200el Human ETS Family Member, ELF3
;    NUMBER OF SEQUENCES:  4
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  SmithKline Beecham Corporation
;      STREET:  709 Swedeland Road, P.O. Box 1539
;      CITY:  King of Prussia
;      STATE:  PA
;      COUNTRY:  USA
;      ZIP:  19406-0939
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  DISKETTE, 3.5 INCH, 1.44 Mb STORAGE
;      COMPUTER:  IBM 486
;      OPERATING SYSTEM:  WINDOWS FOR WORKGROUPS
;      SOFTWARE:  MICROSOFT WORD
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/746,789A
;      FILING DATE:  No. 5789200ember 15, 1996
;      CLASSIFICATION:  514
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:
;      FILING DATE:
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  William T. Han
;      REGISTRATION NUMBER:  34,344
;      REFERENCE/DOCKET NUMBER:  ATG 50024
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  610 270 5219
;      TELEFAX:  610 270 4026
;  INFORMATION FOR SEQ ID NO:  1:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  1920
;      TYPE:  Nucleic Acid
;      STRANDEDNESS:  Single
;      TOPOLOGY:  Linear
;    ANTI-SENSE:  No
US-08-746-789A-1

  Query Match             100.0%;  Score 21;  DB 1;  Length 1920;
  Best Local Similarity   100.0%;  Pred. No. 1;
  Matches   21;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 CCGGGACATCCTCATCCACCC 21
              |||||||||||||||||||||
Db        951 CCGGGACATCCTCATCCACCC 971


RESULT 9
US-09-328-352-99/c
; Sequence 99, Application US/09328352
; Patent No. 6562958
; GENERAL INFORMATION:
;  APPLICANT: Gary L. Breton et al.
;  TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO ACINETOBACTER
;  TITLE OF INVENTION: BAUMANNII FOR DIAGNOSTICS AND THERAPEUTICS
;  FILE REFERENCE: GTC99-03PA
;  CURRENT APPLICATION NUMBER: US/09/328,352
;  CURRENT FILING DATE: 1999-06-04
;  NUMBER OF SEQ ID NOS: 8252
; SEQ ID NO 99
;    LENGTH: 1086
;    TYPE: DNA
;    ORGANISM: Acinetobacter baumannii
US-09-328-352-99

  Query Match             78.1%;  Score 16.4;  DB 4;  Length 1086;
  Best Local Similarity   94.4%;  Pred. No. 1.1e+02;
  Matches   17;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          4 GGACATCCTCATCCACCC 21
              |||||| ||||||||||
Db         75 GGACATACTCATCCACCC 58


RESULT 10
US-08-456-647B-1/c
; Sequence 1, Application US/08456647B
; Patent No. 5811516
;  GENERAL INFORMATION:
;    APPLICANT:  Lemke Ph.D. et al., Greg E.
;    TITLE OF INVENTION:  PROTEIN-TYROSINE KINASE GENES
;    NUMBER OF SEQUENCES:  54
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Fish & Richardson P.C.
;      STREET:  4225 Executive Square, Suite 1400
;      CITY:  La Jolla
;      STATE:  CA
;      COUNTRY:  US
;      ZIP:  92037
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/456,647B
;      FILING DATE:  02-JUN-1995
;      CLASSIFICATION:  530
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 08/237,401
;      FILING DATE:  02-MAY-1994
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 07/884,486
;      FILING DATE:  15-MAY-1992
```

```
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Wetherell Ph.D., John R.
;      REGISTRATION NUMBER:  31,678
;      REFERENCE/DOCKET NUMBER:  07251/007002
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (619) 678-5070
;      TELEFAX:  (619) 678-5099
;  INFORMATION FOR SEQ ID NO:  1:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  165 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  DNA
;    IMMEDIATE SOURCE:
;      CLONE:  Tyro-1
;    FEATURE:
;      NAME/KEY:  CDS
;      LOCATION:  1..165
US-08-456-647B-1

  Query Match             77.1%;  Score 16.2;  DB 1;  Length 165;
  Best Local Similarity   85.7%;  Pred. No. 1.1e+02;
  Matches   18;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy          1 CCGGGACATCCTCATCCACCC 21
              ||||| |||||||| |||||
Db         76 CCGGGTCATCCTCAAGCACCC 56


RESULT 11
US-08-237-401A-1/c
; Sequence 1, Application US/08237401A
; Patent No. 5837448
;  GENERAL INFORMATION:
;    APPLICANT:  Lemke Ph.D. et al., Greg E.
;    TITLE OF INVENTION:  PROTEIN-TYROSINE KINASE GENES
;    NUMBER OF SEQUENCES:  54
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Fish & Richardson P.C.
;      STREET:  4225 Executive Square, Suite 1400
;      CITY:  La Jolla
;      STATE:  CA
;      COUNTRY:  US
;      ZIP:  92037
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/237,401A
;      FILING DATE:  02-MAY-1994
;      CLASSIFICATION:  435
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 07/884,486
;      FILING DATE:  15-MAY-1992
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Haile Ph.D., Lisa A.
;      REGISTRATION NUMBER:  38,347
;      REFERENCE/DOCKET NUMBER:  07251/007001
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (619) 678-5070
;      TELEFAX:  (619) 678-5099
;  INFORMATION FOR SEQ ID NO:  1:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  165 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  DNA
;    IMMEDIATE SOURCE:
;      CLONE:  Tyro-1
;    FEATURE:
;      NAME/KEY:  CDS
;      LOCATION:  1..165
US-08-237-401A-1

  Query Match             77.1%;  Score 16.2;  DB 2;  Length 165;
  Best Local Similarity   85.7%;  Pred. No. 1.1e+02;
  Matches   18;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy          1 CCGGGACATCCTCATCCACCC 21
              ||||| |||||||| |||||
Db         76 CCGGGTCATCCTCAAGCACCC 56


RESULT 12
US-09-643-597-303
; Sequence 303, Application US/09643597
; Patent No. 6426072
; GENERAL INFORMATION:
;  APPLICANT:  Wang, Tongtong
;  APPLICANT:  Fan, Liqun
;  APPLICANT:  Kalos, Michael D.
;  APPLICANT:  Bangur, Chaitanya S.
;  APPLICANT:  Hosken, Nancy
;  APPLICANT:  Fanger, Gary R.
;  APPLICANT:  Li, Samuel X.
;  APPLICANT:  Wang, Aijun
;  APPLICANT:  Skeiky, Yasir A.W.
;  APPLICANT:  Henderson, Robert A.
;  APPLICANT:  McNeill, Patricia D.
;  TITLE OF INVENTION:  COMPOSITIONS AND METHODS FOR THE THERAPY
;  TITLE OF INVENTION:  AND DIAGNOSIS OF LUNG CANCER
;  FILE REFERENCE:  210121.455C11
;  CURRENT APPLICATION NUMBER: US/09/643,597
;  CURRENT FILING DATE:  2000-08-21
;  NUMBER OF SEQ ID NOS:  369
;  SOFTWARE:  FastSEQ for Windows Version 3.0
; SEQ ID NO 303
;   LENGTH: 361
;   TYPE: DNA
;   ORGANISM: Homo sapien
;   FEATURE:
;   NAME/KEY: misc_feature
;   LOCATION: (1)...(361)
;   OTHER INFORMATION: n = A,T,C or G
US-09-643-597-303

  Query Match             77.1%;  Score 16.2;  DB 4;  Length 361;
  Best Local Similarity   85.7%;  Pred. No. 1.2e+02;
  Matches   18;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy          1 CCGGGACATCCTCATCCACCC 21
              ||||||| |||||  ||||||
Db        257 CCGGGACGTCCTCCCCCACCC 277


RESULT 13
US-09-480-884A-303
; Sequence 303, Application US/09480884A
; Patent No. 6482597
; GENERAL INFORMATION:
;  APPLICANT: Wang, Tongtong
;  APPLICANT:  Fan, Liqun
;  APPLICANT:  Hosken, Nancy A.
;  APPLICANT:  Kalos, Michael D.
;  APPLICANT:  Fanger, Gary R.
;  TITLE OF INVENTION: COMPOUNDS AND METHODS FOR THERAPY
;  TITLE OF INVENTION:  AND DIAGNOSIS OF LUNG CANCER
;  FILE REFERENCE: 210121.455C6
;  CURRENT APPLICATION NUMBER: US/09/480,884A
;  CURRENT FILING DATE:  2001-08-27
;  NUMBER OF SEQ ID NOS: 330
;  SOFTWARE: FastSEQ for Windows Version 3.0
```

```
; SEQ ID NO 303
;   LENGTH: 361
;   TYPE: DNA
;   ORGANISM: Homo sapien
;   FEATURE:
;   NAME/KEY: misc_feature
;   LOCATION: (1)...(361)
;   OTHER INFORMATION: n = A,T,C or G
US-09-480-884A-303

  Query Match            77.1%;  Score 16.2;  DB 4;  Length 361;
  Best Local Similarity  85.7%;  Pred. No. 1.2e+02;
  Matches   18;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy          1 CCGGGACATCCTCATCCACCC 21
              ||||||| |||||  ||||||
Db        257 CCGGGACGTCCTCCCCCACCC 277


RESULT 14
US-09-542-615A-303
; Sequence 303, Application US/09542615A
; Patent No. 6518256
; GENERAL INFORMATION:
;  APPLICANT:  Wang, Tongtong
;  APPLICANT:  Fan, Liqun
;  APPLICANT:  Kalos, Michael D.
;  APPLICANT:  Bangur, Chaitanya S.
;  APPLICANT:  Hosken, Nancy A.
;  APPLICANT:  Fanger, Gary R.
;  TITLE OF INVENTION:  COMPOUNDS AND METHODS FOR THERAPY
;  TITLE OF INVENTION:  AND DIAGNOSIS OF LUNG CANCER
;  FILE REFERENCE:  210121.455C8
;  CURRENT APPLICATION NUMBER: US/09/542,615A
;  CURRENT FILING DATE:  2000-04-14
;  NUMBER OF SEQ ID NOS:  350
;  SOFTWARE:  FastSEQ for Windows Version 3.0
; SEQ ID NO 303
;   LENGTH: 361
;   TYPE: DNA
;   ORGANISM: Homo sapien
;   FEATURE:
;   NAME/KEY: misc_feature
;   LOCATION: (1)...(361)
;   OTHER INFORMATION: n = A,T,C or G
US-09-542-615A-303

  Query Match            77.1%;  Score 16.2;  DB 4;  Length 361;
  Best Local Similarity  85.7%;  Pred. No. 1.2e+02;
  Matches   18;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy          1 CCGGGACATCCTCATCCACCC 21
              ||||||| |||||  ||||||
Db        257 CCGGGACGTCCTCCCCCACCC 277


RESULT 15
US-09-606-421B-303
; Sequence 303, Application US/09606421B
; Patent No. 6531315
; GENERAL INFORMATION:
;  APPLICANT: Wang, Tongtong
;  APPLICANT:  Fan, Liqun
;  APPLICANT:  Kalos, Michael D.
;  APPLICANT:  Bangur, Chaitanya S.
;  APPLICANT:  Hosken, Nancy
;  APPLICANT:  Fanger, Gary R.
;  APPLICANT:  Li, Samuel X.
;  APPLICANT:  Wang, Aijun
;  APPLICANT:  Skeiky, Yasir A.W.
;  TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY
;  TITLE OF INVENTION:  AND DIAGNOSIS OF LUNG CANCER
;  FILE REFERENCE: 210121.455C9
;  CURRENT APPLICATION NUMBER: US/09/606,421B
;  CURRENT FILING DATE:  2000-06-28
;  NUMBER OF SEQ ID NOS: 358
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 303
;   LENGTH: 361
;   TYPE: DNA
;   ORGANISM: Homo sapien
;   FEATURE:
;   NAME/KEY: misc_feature
;   LOCATION: (1)...(361)
;   OTHER INFORMATION: n = A,T,C or G
US-09-606-421B-303

  Query Match            77.1%;  Score 16.2;  DB 4;  Length 361;
  Best Local Similarity  85.7%;  Pred. No. 1.2e+02;
  Matches   18;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy          1 CCGGGACATCCTCATCCACCC 21
              ||||||| |||||  ||||||
Db        257 CCGGGACGTCCTCCCCCACCC 277


Search completed: February 13, 2004, 01:54:42
Job time : 2.20792 secs
```

GenCore version 5.1.6

OM protein - nucleic search, using frame_plus_p2n model

Run on: February 12, 2004, 19:34:21 ; Search time 4.03329 Seconds
(without alignments)
1750.959 Million cell updates/sec

Title: US-08-978-217-12
Perfect score: 84
Sequence: 1 KNSSGWKEEEVLQSRN 16

Scoring table: BLOSUM62
Xgapop 10.0 , Xgapext 0.5
Ygapop 10.0 , Ygapext 0.5
Fgapop 6.0 , Fgapext 7.0
Delop 6.0 , Delext 7.0

Searched: 569978 seqs, 220691566 residues

Total number of hits satisfying chosen parameters: 1139956

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Command line parameters:
-MODEL=frame+_p2n.model -DEV=xlh
-Q=/cgn2_1/USPTO_spool/US08978217/runat_10022004_133826_20481/app_query.fasta_1.1500
-DB=Issued_Patents_NA -QFMT=fastap -SUFFIX=rni -MINMATCH=0.1 -LOOPCL=0
-LOOPEXT=0 -UNITS=bits -START=1 -END=-1 -MATRIX=blosum62 -TRANS=human40.cdi
-LIST=45 -DOCALIGN=200 -THR_SCORE=pct -THR_MAX=100 -THR_MIN=0 -ALIGN=15
-MODE=LOCAL -OUTFMT=pto -NORM=ext -HEAPSIZE=500 -MINLEN=0 -MAXLEN=2000000000
-USER=US08978217_@CGN_1_1_115_@runat_10022004_133826_20481 -NCPU=6 -ICPU=3
-NO_MMAP -LARGEQUERY -NEG_SCORES=0 -WAIT -DSPBLOCK=100 -LONGLOG
-DEV_TIMEOUT=120 -WARN_TIMEOUT=30 -THREADS=1 -XGAPOP=10 -XGAPEXT=0.5 -FGAPOP=6
-FGAPEXT=7 -YGAPOP=10 -YGAPEXT=0.5 -DELOP=6 -DELEXT=7

Database : Issued_Patents_NA:*
1: /cgn2_6/ptodata/1/ina/5A_COMB.seq:*
2: /cgn2_6/ptodata/1/ina/5B_COMB.seq:*
3: /cgn2_6/ptodata/1/ina/6A_COMB.seq:*
4: /cgn2_6/ptodata/1/ina/6B_COMB.seq:*
5: /cgn2_6/ptodata/1/ina/PCTUS_COMB.seq:*
6: /cgn2_6/ptodata/1/ina/backfiles1.seq:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.		Score	% Query Match	Length	DB	ID	Description
1		84	100.0	237	4	US-09-016-434-927	Sequence 927, App
2		84	100.0	463	4	US-09-300-958A-25	Sequence 25, Appl
3		84	100.0	1907	4	US-09-300-958A-27	Sequence 27, Appl
4		84	100.0	1907	4	US-09-570-593-4	Sequence 4, Appli
5		84	100.0	1920	1	US-08-746-789A-1	Sequence 1, Appli
6	c	46	54.8	1348	4	US-09-638-649-6	Sequence 6, Appli
7		46	54.8	8100	4	US-09-554-337-4	Sequence 4, Appli
8		46	54.8	11517	1	US-07-920-281C-1	Sequence 1, Appli
9		46	54.8	11517	3	US-08-466-277-1	Sequence 1, Appli
10		46	54.8	15538	4	US-09-554-337-1	Sequence 1, Appli
11	c	45	53.6	993	4	US-09-464-535-25	Sequence 25, Appl
12	c	45	53.6	7492	4	US-09-299-141-5	Sequence 5, Appli
13	c	45	53.6	10627	1	US-08-060-925A-12	Sequence 12, Appl
14	c	44	52.4	2763	4	US-09-668-680-8	Sequence 8, Appli
15	c	44	52.4	3396	4	US-09-668-680-6	Sequence 6, Appli
16	c	44	52.4	3423	4	US-09-668-680-7	Sequence 7, Appli
17	c	44	52.4	50000	4	US-09-146-053-4	Sequence 4, Appli
18	c	43	51.2	4417	3	US-07-741-453A-57	Sequence 57, Appl
19		43	51.2	8543	3	US-08-496-944-1	Sequence 1, Appli
20	c	42.5	50.6	6396	4	US-09-620-312D-226	Sequence 226, App
21		42	50.0	694	2	US-08-537-400-15	Sequence 15, Appl
22		42	50.0	694	2	US-08-706-702-17	Sequence 17, Appl
23		42	50.0	694	3	US-08-706-706-17	Sequence 17, Appl
24		42	50.0	694	4	US-09-238-471-17	Sequence 17, Appl
25	c	42	50.0	1265	4	US-09-702-705-95	Sequence 95, Appl
26	c	42	50.0	1265	4	US-09-736-457-95	Sequence 95, Appl
27		42	50.0	1485	3	US-08-484-661A-38	Sequence 38, Appl
28		42	50.0	1485	3	US-08-656-664-38	Sequence 38, Appl
29		42	50.0	1485	5	PCT-US96-09641-38	Sequence 38, Appl
30		42	50.0	1716	3	US-08-484-661A-36	Sequence 36, Appl
31		42	50.0	1716	3	US-08-656-664-36	Sequence 36, Appl
32		42	50.0	1716	5	PCT-US96-09641-36	Sequence 36, Appl
33		42	50.0	1737	3	US-08-484-661A-10	Sequence 10, Appl
34		42	50.0	1737	3	US-08-656-664-10	Sequence 10, Appl
35		42	50.0	1737	5	PCT-US96-09641-10	Sequence 10, Appl
36		42	50.0	1769	3	US-09-257-584-6	Sequence 6, Appli
37		42	50.0	1833	3	US-08-484-661A-7	Sequence 7, Appli
38		42	50.0	1833	3	US-08-484-661A-15	Sequence 15, Appl
39		42	50.0	1833	3	US-08-484-661A-18	Sequence 18, Appl
40		42	50.0	1833	3	US-08-484-661A-22	Sequence 22, Appl
41		42	50.0	1833	3	US-08-484-661A-25	Sequence 25, Appl
42		42	50.0	1833	3	US-08-484-661A-28	Sequence 28, Appl
43		42	50.0	1833	3	US-08-484-661A-32	Sequence 32, Appl
44		42	50.0	1833	3	US-08-484-661A-34	Sequence 34, Appl
45		42	50.0	1833	3	US-08-656-664-7	Sequence 7, Appli

ALIGNMENTS

RESULT 1
US-09-016-434-927
; Sequence 927, Application US/09016434
; Patent No. 6500938
; GENERAL INFORMATION:
; APPLICANT: Janice Au-Young
; APPLICANT: Jeffrey J. Seilhamer
; TITLE OF INVENTION: COMPOSITION FOR THE DETECTION OF SIGNALING
; TITLE OF INVENTION: PATHWAY GENE EXPRESSION
; NUMBER OF SEQUENCES: 1490
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: INCYTE PHARMACEUTICALS, INC.
; STREET: 3174 PORTER DRIVE
; CITY: PALO ALTO
; STATE: CALIFORNIA
; COUNTRY: USA
; ZIP: 94304
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Word Perfect 6.1 for Windows/MS-DOS 6.2
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/016,434
; FILING DATE: HEREWITH
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER:
; FILING DATE:
; CLASSIFICATION:
; ATTORNEY/AGENT INFORMATION:
; NAME: Zeller, Karen J.
; REGISTRATION NUMBER: 37,071
; REFERENCE/DOCKET NUMBER: PA-0002 US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (650) 855-0555

```
;      TELEFAX:  (650) 845-4166
;  INFORMATION FOR SEQ ID NO:  927:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  237 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    IMMEDIATE SOURCE:
;      LIBRARY:  COLNCRT01
;      CLONE:  773734
US-09-016-434-927

Alignment Scores:
Pred. No.:              9.19e-07        Length:         237
Score:                  84.00           Matches:        16
Percent Similarity:     100.00%         Conservative:   0
Best Local Similarity:  100.00%         Mismatches:     0
Query Match:            100.00%         Indels:         0
DB:                     4               Gaps:           0

US-08-978-217-12 (1-16) x US-09-016-434-927 (1-237)

Qy          1 LysAsnSerSerGlyTrpLysGluGluGluValLeuGlnSerArgAsn 16
              ||||||||||||||||||||||||||||||||||||||||||||||||
Db        116 AAAAACTCAAGCGGCTGGAAGGAGGAAGAGGTTCTCCAGAGTCGGAAC 163

RESULT 2
US-09-300-958A-25
; Sequence 25, Application US/09300958A
; Patent No. 6495319
; GENERAL INFORMATION:
;  APPLICANT:  McClelland, Michael
;  APPLICANT:  Welsh, John
;  APPLICANT:  Trenkle, Thomas
;  TITLE OF INVENTION:  Reduced Complexity Nucleic Acid Targets and Methods of
;  TITLE OF INVENTION:  Using Same
;  FILE REFERENCE:  P-PH 3457
;  CURRENT APPLICATION NUMBER: US/09/300,958A
;  CURRENT FILING DATE:  1999-04-27
;  PRIOR APPLICATION NUMBER:  60/083,331
;  PRIOR FILING DATE:  1998-04-27
;  PRIOR APPLICATION NUMBER:  60/098,070
;  PRIOR FILING DATE:  1998-08-27
;  PRIOR APPLICATION NUMBER:  60/118,624
;  PRIOR FILING DATE:  1999-02-04
;  NUMBER OF SEQ ID NOS:  85
;  SOFTWARE:  PatentIn Ver. 2.0
; SEQ ID NO 25
;   LENGTH: 463
;   TYPE: DNA
;   ORGANISM: Homo sapiens
;   FEATURE:
;   NAME/KEY: unsure
;   LOCATION: (368)
;   NAME/KEY: unsure
;   LOCATION: (402)
;   NAME/KEY: unsure
;   LOCATION: (458)
US-09-300-958A-25

Alignment Scores:
Pred. No.:              2.03e-06        Length:         463
Score:                  84.00           Matches:        16
Percent Similarity:     100.00%         Conservative:   0
Best Local Similarity:  100.00%         Mismatches:     0
Query Match:            100.00%         Indels:         0
DB:                     4               Gaps:           0

US-08-978-217-12 (1-16) x US-09-300-958A-25 (1-463)

Qy          1 LysAsnSerSerGlyTrpLysGluGluGluValLeuGlnSerArgAsn 16
              ||||||||||||||||||||||||||||||||||||||||||||||||
Db          8 AAAAACTCAAGCGGCTGGAAGGAGGAAGAGGTTCTCCAGAGTCGGAAC 55

RESULT 3
US-09-300-958A-27
; Sequence 27, Application US/09300958A
; Patent No. 6495319
; GENERAL INFORMATION:
;  APPLICANT:  McClelland, Michael
;  APPLICANT:  Welsh, John
;  APPLICANT:  Trenkle, Thomas
;  TITLE OF INVENTION:  Reduced Complexity Nucleic Acid Targets and Methods of
;  TITLE OF INVENTION:  Using Same
;  FILE REFERENCE:  P-PH 3457
;  CURRENT APPLICATION NUMBER: US/09/300,958A
;  CURRENT FILING DATE:  1999-04-27
;  PRIOR APPLICATION NUMBER:  60/083,331
;  PRIOR FILING DATE:  1998-04-27
;  PRIOR APPLICATION NUMBER:  60/098,070
;  PRIOR FILING DATE:  1998-08-27
;  PRIOR APPLICATION NUMBER:  60/118,624
;  PRIOR FILING DATE:  1999-02-04
;  NUMBER OF SEQ ID NOS:  85
;  SOFTWARE:  PatentIn Ver. 2.0
; SEQ ID NO 27
;   LENGTH: 1907
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-300-958A-27

Alignment Scores:
Pred. No.:              1.09e-05        Length:         1907
Score:                  84.00           Matches:        16
Percent Similarity:     100.00%         Conservative:   0
Best Local Similarity:  100.00%         Mismatches:     0
Query Match:            100.00%         Indels:         0
DB:                     4               Gaps:           0

US-08-978-217-12 (1-16) x US-09-300-958A-27 (1-1907)

Qy          1 LysAsnSerSerGlyTrpLysGluGluGluValLeuGlnSerArgAsn 16
              ||||||||||||||||||||||||||||||||||||||||||||||||
Db       1161 AAAAACTCAAGCGGCTGGAAGGAGGAAGAGGTTCTCCAGAGTCGGAAC 1208

RESULT 4
US-09-570-593-4
; Sequence 4, Application US/09570593
; Patent No. 6566063
; GENERAL INFORMATION:
;  APPLICANT:  Kaufmann, Joerg
;  APPLICANT:  Xin, Hong
;  APPLICANT:  Harrowe, Greg
;  TITLE OF INVENTION:  EXPRESSION OF ETS-DOMAIN PROTEINS IN
;  TITLE OF INVENTION:  CANCER
;  FILE REFERENCE:  2300-1556
;  CURRENT APPLICATION NUMBER: US/09/570,593
;  CURRENT FILING DATE:  2000-05-12
;  PRIOR APPLICATION NUMBER:  60/134,112
;  PRIOR FILING DATE:  1999-05-14
;  NUMBER OF SEQ ID NOS:  13
;  SOFTWARE:  FastSEQ for Windows Version 4.0
; SEQ ID NO 4
;   LENGTH: 1907
;   TYPE: DNA
;   ORGANISM: Homo sapiens
;   FEATURE:
;   NAME/KEY: CDS
;   LOCATION: (96)...(1211)
;   OTHER INFORMATION: Human epithelial-restricted with serine box (ESX)
;   OTHER INFORMATION: protein.
US-09-570-593-4

Alignment Scores:
Pred. No.:              1.09e-05        Length:         1907
Score:                  84.00           Matches:        16
```

```
Percent Similarity:     100.00%        Conservative:  0
Best Local Similarity:  100.00%        Mismatches:    0
Query Match:            100.00%        Indels:        0
DB:                     4              Gaps:          0

US-08-978-217-12 (1-16) x US-09-570-593-4 (1-1907)

Qy          1 LysAsnSerSerGlyTrpLysGluGluGluValLeuGlnSerArgAsn 16
              ||||||||||||||||||||||||||||||||||||||||||||||||
Db       1161 AAAAACTCAAGCGGCTGGAAGGAGGAAGAGGTTCTCCAGAGTCGGAAC 1208

RESULT 5
US-08-746-789A-1
; Sequence 1, Application US/08746789A
; Patent No. 5789200
;  GENERAL INFORMATION:
;    APPLICANT:  Ismail Kola, Martin J. Tymms, Christine DeBouck
;    TITLE OF INVENTION:  A No. 5789200el Human ETS Family Member, ELF3
;    NUMBER OF SEQUENCES:  4
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  SmithKline Beecham Corporation
;      STREET:  709 Swedeland Road, P.O. Box 1539
;      CITY:  King of Prussia
;      STATE:  PA
;      COUNTRY:  USA
;      ZIP:  19406-0939
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  DISKETTE, 3.5 INCH, 1.44 Mb STORAGE
;      COMPUTER:  IBM 486
;      OPERATING SYSTEM:  WINDOWS FOR WORKGROUPS
;      SOFTWARE:  MICROSOFT WORD
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/746,789A
;      FILING DATE:  No. 5789200ember 15, 1996
;      CLASSIFICATION:  514
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:
;      FILING DATE:
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  William T. Han
;      REGISTRATION NUMBER:  34,344
;      REFERENCE/DOCKET NUMBER:  ATG 50024
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  610 270 5219
;      TELEFAX:  610 270 4026
;  INFORMATION FOR SEQ ID NO:  1:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  1920
;      TYPE:  Nucleic Acid
;      STRANDEDNESS:  Single
;      TOPOLOGY:  Linear
;    ANTI-SENSE:  No
US-08-746-789A-1

Alignment Scores:
Pred. No.:              1.1e-05        Length:        1920
Score:                  84.00          Matches:       16
Percent Similarity:     100.00%        Conservative:  0
Best Local Similarity:  100.00%        Mismatches:    0
Query Match:            100.00%        Indels:        0
DB:                     1              Gaps:          0

US-08-978-217-12 (1-16) x US-08-746-789A-1 (1-1920)

Qy          1 LysAsnSerSerGlyTrpLysGluGluGluValLeuGlnSerArgAsn 16
              ||||||||||||||||||||||||||||||||||||||||||||||||
Db       1180 AAAAACTCAAGCGGCTGGAAGGAGGAAGAGGTTCTCCAGAGTCGGAAC 1227

RESULT 6
US-09-638-649-6/c
; Sequence 6, Application US/09638649
; Patent No. 6563015
; GENERAL INFORMATION:
;  APPLICANT:  Stern, David M.
;  APPLICANT:  Schmidt, Ann Marie
;  APPLICANT:  Yan, Shi Du
;  TITLE OF INVENTION:  TRANSGENIC MICE OVER-EXPRESSING RECEPTOR FOR ADVANCED
;  TITLE OF INVENTION:  GLYCATION ENDPRODUCT (RAGE) AND MUTANT APP IN BRAIN AND
;  TITLE OF INVENTION:  USES THEREOF
;  FILE REFERENCE:  0575/62175
;  CURRENT APPLICATION NUMBER: US/09/638,649
;  CURRENT FILING DATE:  2000-08-14
;  NUMBER OF SEQ ID NOS:  10
;  SOFTWARE:  PatentIn Ver. 2.1
; SEQ ID NO 6
;   LENGTH: 1348
;   TYPE: DNA
;   ORGANISM: Murine
US-09-638-649-6

Alignment Scores:
Pred. No.:              39.9           Length:        1348
Score:                  46.00          Matches:       8
Percent Similarity:     100.00%        Conservative:  0
Best Local Similarity:  100.00%        Mismatches:    0
Query Match:            54.76%         Indels:        0
DB:                     4              Gaps:          0

US-08-978-217-12 (1-16) x US-09-638-649-6 (1-1348)

Qy          2 AsnSerSerGlyTrpLysGluGlu 9
              |||||||||||||||||||||||||
Db        275 AATTCCAGTGGCTGGAAGGAGGAG 252

RESULT 7
US-09-554-337-4
; Sequence 4, Application US/09554337
; Patent No. 6475780
; GENERAL INFORMATION:
;  APPLICANT: Parrington, Mark
;  APPLICANT:  Li, Xiaomao
;  APPLICANT:  Klein, Michel H.
;  TITLE OF INVENTION: ALPHAVIRUS VECTORS FOR PARAMYXOVIRUS VACCINES
;  FILE REFERENCE: 1038-1042 MIS
;  CURRENT APPLICATION NUMBER: US/09/554,337
;  CURRENT FILING DATE:  2000-10-20
;  PRIOR APPLICATION NUMBER: 60/065,791
;  PRIOR FILING DATE: 1997-11-14
;  PRIOR APPLICATION NUMBER: PCT/CA98/01064
;  PRIOR FILING DATE: 1998-11-13
;  NUMBER OF SEQ ID NOS: 7
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 4
;   LENGTH: 8100
;   TYPE: DNA
;   ORGANISM: respiratory syncytial virus
US-09-554-337-4

Alignment Scores:
Pred. No.:              335            Length:        8100
Score:                  46.00          Matches:       7
Percent Similarity:     85.71%         Conservative:  5
Best Local Similarity:  50.00%         Mismatches:    2
Query Match:            54.76%         Indels:        0
DB:                     4              Gaps:          0

US-08-978-217-12 (1-16) x US-09-554-337-4 (1-8100)

Qy          3 SerSerGlyTrpLysGluGluGluValLeuGlnSerArgAsn 16
              ::::::   |||   :::|||:::|||||||||:::||||||
Db        397 GCCACAAACTGGGCCGACGAGCAGGTGTTACAGGCCAGGAAC 438

RESULT 8
US-07-920-281C-1
; Sequence 1, Application US/07920281C
; Patent No. 5739026
```

```
;  GENERAL INFORMATION:
;    APPLICANT:  Garoff, Henrik
;    APPLICANT:  Liljestrom, Peter
;    TITLE OF INVENTION:  DNA Expression Systems Based on
;    TITLE OF INVENTION:  Alphaviruses
;    NUMBER OF SEQUENCES:  27
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Birch, Stewart, Kolasch & Birch
;      STREET:  P.O. Box 747
;      CITY:  Falls Church
;      STATE:  Virginia
;      COUNTRY:  USA
;      ZIP:  22040-0747
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/07/920,281C
;      FILING DATE:  13-AUG-1992
;      CLASSIFICATION:  435
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Murphy Jr., Gerald M.
;      REGISTRATION NUMBER:  28,977
;      REFERENCE/DOCKET NUMBER:  828-103P
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  703-241-1300
;      TELEFAX:  703-241-2848
;      TELEX:  248345
;  INFORMATION FOR SEQ ID NO:  1:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  11517 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  RNA (genomic)
;    HYPOTHETICAL:  NO
;    ANTI-SENSE:  NO
;    ORIGINAL SOURCE:
;      ORGANISM:  Semliki Forest Virus
;    FEATURE:
;      NAME/KEY:  -
;      LOCATION:  1..11517
;      OTHER INFORMATION:  /label= genome
;      OTHER INFORMATION:  /note= "Semliki Forest Virus complete nucleotide
;      OTHER INFORMATION:  sequence, presented as a cloned DNA sequence; see
;      OTHER INFORMATION:  Figure 5."
;    FEATURE:
;      NAME/KEY:  CDS
;      LOCATION:  87..7379
;      OTHER INFORMATION:  /product= "SFV polyprotein"
;    FEATURE:
;      NAME/KEY:  CDS
;      LOCATION:  7421..11179
;      OTHER INFORMATION:  /product= "SFV polyprotein"
US-07-920-281C-1

Alignment Scores:
Pred. No.:                509             Length:         11517
Score:                    46.00           Matches:        7
Percent Similarity:       85.71%          Conservative:   5
Best Local Similarity:    50.00%          Mismatches:     2
Query Match:              54.76%          Indels:         0
DB:                       1               Gaps:           0

US-08-978-217-12 (1-16) x US-07-920-281C-1 (1-11517)

Qy          3 SerSerGlyTrpLysGluGluGluValLeuGlnSerArgAsn 16
              :::::   |||   :::|||:::|||||||||:::||||||
Db        675 GCCACAAACTGGGCCGACGAGCAGGTGTTACAGGCCAGGAAC 716

RESULT 9
```

```
US-08-466-277-1
; Sequence 1, Application US/08466277
; Patent No. 6190666
;  GENERAL INFORMATION:
;       APPLICANT: Garoff, Henrik
;                  Liljestrom, Peter
;       TITLE OF INVENTION: DNA Expression Systems Based on
;                           Alphaviruses
;       NUMBER OF SEQUENCES: 27
;       CORRESPONDENCE ADDRESS:
;            ADDRESSEE: Birch, Stewart, Kolasch & Birch
;            STREET: P.O. Box 747
;            CITY: Falls Church
;            STATE: Virginia
;            COUNTRY: USA
;            ZIP: 22040-0747
;       COMPUTER READABLE FORM:
;            MEDIUM TYPE: Floppy disk
;            COMPUTER: IBM PC compatible
;            OPERATING SYSTEM: PC-DOS/MS-DOS
;            SOFTWARE: PatentIn Release #1.0, Version #1.25
;       CURRENT APPLICATION DATA:
;            APPLICATION NUMBER: US/08/466,277
;            FILING DATE: 06-Jun-1995
;            CLASSIFICATION: <Unknown>
;       PRIOR APPLICATION DATA:
;            APPLICATION NUMBER: 07/920,281
;            FILING DATE: <Unknown>
;       ATTORNEY/AGENT INFORMATION:
;            NAME: Murphy Jr., Gerald M.
;            REGISTRATION NUMBER: 28,977
;            REFERENCE/DOCKET NUMBER: 828-103P
;       TELECOMMUNICATION INFORMATION:
;            TELEPHONE: 703-241-1300
;            TELEFAX: 703-241-2848
;            TELEX: 248345
;  INFORMATION FOR SEQ ID NO: 1:
;       SEQUENCE CHARACTERISTICS:
;            LENGTH: 11517 base pairs
;            TYPE: nucleic acid
;            STRANDEDNESS: single
;            TOPOLOGY: linear
;       MOLECULE TYPE: RNA (genomic)
;       HYPOTHETICAL: NO
;       ANTI-SENSE: NO
;       ORIGINAL SOURCE:
;            ORGANISM: Semliki Forest Virus
;       FEATURE:
;            NAME/KEY:  -
;            LOCATION:  1..11517
;            OTHER INFORMATION:  /label= genome
;            /note= "Semliki Forest Virus complete nucleotide
;            sequence, presented as a cloned DNA sequence; see
;            Figure 5."
;       FEATURE:
;            NAME/KEY:  CDS
;            LOCATION:  87..7379
;            OTHER INFORMATION:  /product= "SFV polyprotein"
;       FEATURE:
;            NAME/KEY:  CDS
;            LOCATION:  7421..11179
;            OTHER INFORMATION:  /product= "SFV polyprotein"
;       SEQUENCE DESCRIPTION: SEQ ID NO: 1:
US-08-466-277-1

Alignment Scores:
Pred. No.:                509             Length:         11517
Score:                    46.00           Matches:        7
Percent Similarity:       85.71%          Conservative:   5
Best Local Similarity:    50.00%          Mismatches:     2
Query Match:              54.76%          Indels:         0
DB:                       3               Gaps:           0
```

US-08-978-217-12 (1-16) x US-08-466-277-1 (1-11517)

```
Qy          3 SerSerGlyTrpLysGluGluGluValLeuGlnSerArgAsn 16
              ::::::   |||   :::|||:::|||||||||:::||||||
Db        675 GCCACAAACTGGGCCGACGAGCAGGTGTTACAGGCCAGGAAC 716
```

RESULT 10
US-09-554-337-1
; Sequence 1, Application US/09554337
; Patent No. 6475780
; GENERAL INFORMATION:
; APPLICANT: Parrington, Mark
; APPLICANT: Li, Xiaomao
; APPLICANT: Klein, Michel H.
; TITLE OF INVENTION: ALPHAVIRUS VECTORS FOR PARAMYXOVIRUS VACCINES
; FILE REFERENCE: 1038-1042 MIS
; CURRENT APPLICATION NUMBER: US/09/554,337
; CURRENT FILING DATE: 2000-10-20
; PRIOR APPLICATION NUMBER: 60/065,791
; PRIOR FILING DATE: 1997-11-14
; PRIOR APPLICATION NUMBER: PCT/CA98/01064
; PRIOR FILING DATE: 1998-11-13
; NUMBER OF SEQ ID NOS: 7
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 1
; LENGTH: 15538
; TYPE: DNA
; ORGANISM: respiratory syncytial virus
US-09-554-337-1

Alignment Scores:

Pred. No.:	727	Length:	15538
Score:	46.00	Matches:	7
Percent Similarity:	85.71%	Conservative:	5
Best Local Similarity:	50.00%	Mismatches:	2
Query Match:	54.76%	Indels:	0
DB:	4	Gaps:	0

US-08-978-217-12 (1-16) x US-09-554-337-1 (1-15538)

```
Qy          3 SerSerGlyTrpLysGluGluGluValLeuGlnSerArgAsn 16
              ::::::   |||   :::|||:::|||||||||:::||||||
Db       3221 GCCACAAACTGGGCCGACGAGCAGGTGTTACAGGCCAGGAAC 3262
```

RESULT 11
US-09-464-535-25/c
; Sequence 25, Application US/09464535
; Patent No. 6545200
; GENERAL INFORMATION:
; APPLICANT: Famodu, Omolayo O.
; APPLICANT: Cahoon, Rebecca E.
; APPLICANT: Sakai, Hajime
; APPLICANT: McGonigle, Brian
; APPLICANT: Rafalski, J. Antoni
; TITLE OF INVENTION: STEROL BIOSYNTHETIC ENZYMES
; FILE REFERENCE: BB1306 US NA
; CURRENT APPLICATION NUMBER: US/09/464,535
; CURRENT FILING DATE: 1999-12-15
; EARLIER APPLICATION NUMBER: 60/112,555
; EARLIER FILING DATE: 1998-12-16
; NUMBER OF SEQ ID NOS: 44
; SOFTWARE: Microsoft Office 97
; SEQ ID NO 25
; LENGTH: 993
; TYPE: DNA
; ORGANISM: Glycine max
US-09-464-535-25

Alignment Scores:

Pred. No.:	41.8	Length:	993
Score:	45.00	Matches:	9
Percent Similarity:	78.57%	Conservative:	2
Best Local Similarity:	64.29%	Mismatches:	3
Query Match:	53.57%	Indels:	0
DB:	4	Gaps:	0

US-08-978-217-12 (1-16) x US-09-464-535-25 (1-993)

```
Qy          2 AsnSerSerGlyTrpLysGluGluGluValLeuGlnSerArg 15
              :::||||||||||||:::        |||||||||||||||
Db        661 TCCAGCAGCGGATGGCAATGATCAAGGGTATTACAATCCAGG 620
```

RESULT 12
US-09-299-141-5/c
; Sequence 5, Application US/09299141
; Patent No. 6461606
; GENERAL INFORMATION:
; APPLICANT: FLOTTE, TERENCE R.
; APPLICANT: SONG, SIHONG
; APPLICANT: BYRNE, BARRY J.
; APPLICANT: MORGAN, MICHAEL
; TITLE OF INVENTION: MATERIALS AND METHODS FOR GENE THERAPY
; FILE REFERENCE: 4300.011800
; CURRENT APPLICATION NUMBER: US/09/299,141
; CURRENT FILING DATE: 1999-04-23
; EARLIER APPLICATION NUMBER: 60/083,025
; EARLIER FILING DATE: 1998-04-24
; NUMBER OF SEQ ID NOS: 13
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 5
; LENGTH: 7492
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:p43C-AT-IN
US-09-299-141-5

Alignment Scores:

Pred. No.:	460	Length:	7492
Score:	45.00	Matches:	10
Percent Similarity:	61.90%	Conservative:	3
Best Local Similarity:	47.62%	Mismatches:	2
Query Match:	53.57%	Indels:	6
DB:	4	Gaps:	1

US-08-978-217-12 (1-16) x US-09-299-141-5 (1-7492)

```
Qy          2 AsnSerSerGlyTrp----------------LysGluGluGluValLeuGlnSerArg 15
              ||||||||||||||                ||||||:::   :::   ||||||:::
Db        813 AACAGCTCAGGCTGGTTGAGCAACCTTACCTTTAAAGAAGATGTAATTCACCAGAGCAAA 754

Qy         16 Asn 16
              |||
Db        753 AAC 751
```

RESULT 13
US-08-060-925A-12/c
; Sequence 12, Application US/08060925A
; Patent No. 5439824
; GENERAL INFORMATION:
; APPLICANT: Brantley, Mark
; APPLICANT: Laubach, Victor
; TITLE OF INVENTION: INCREASED EXPRESSION OF ALPHA-1
; TITLE OF INVENTION: ANTITRYPSIN IN EXPRESSION VECTORS THROUGH THE INCLUSION OF
; TITLE OF INVENTION: INTRON II
; NUMBER OF SEQUENCES: 12
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: KNOBBE, MARTENS, OLSON AND BEAR
; STREET: 620 NEWPORT CENTER DRIVE SIXTEENTH FLOOR
; CITY: NEWPORT BEACH
; STATE: CA
; COUNTRY: USA
; ZIP: 92660
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible

```
;       OPERATING SYSTEM:  PC-DOS/MS-DOS
;       SOFTWARE:  PatentIn Release #1.0, Version #1.25
;     CURRENT APPLICATION DATA:
;       APPLICATION NUMBER:  US/08/060,925A
;       FILING DATE:  06-MAY-1993
;       CLASSIFICATION:  435
;     ATTORNEY/AGENT INFORMATION:
;       NAME:  Fuller, Michael L.
;       REGISTRATION NUMBER:  36,516
;       REFERENCE/DOCKET NUMBER:  NIH040.001A
;     TELECOMMUNICATION INFORMATION:
;       TELEPHONE:  619-235-8550
;       TELEFAX:  619-235-0176
;   INFORMATION FOR SEQ ID NO:  12:
;     SEQUENCE CHARACTERISTICS:
;       LENGTH:  10627 base pairs
;       TYPE:  nucleic acid
;       STRANDEDNESS:  single
;       TOPOLOGY:  linear
;     MOLECULE TYPE:  cDNA
;     HYPOTHETICAL:  NO
;     ANTI-SENSE:  NO
US-08-060-925A-12

Alignment Scores:
Pred. No.:                697             Length:         10627
Score:                    45.00           Matches:        10
Percent Similarity:       61.90%          Conservative:   3
Best Local Similarity:    47.62%          Mismatches:     2
Query Match:              53.57%          Indels:         6
DB:                       1               Gaps:           1

US-08-978-217-12 (1-16) x US-08-060-925A-12 (1-10627)

Qy          2 AsnSerSerGlyTrp-----------------LysGluGluGluValLeuGlnSerArg 15
              ||||||||||||||                 ||||||:::   :::   ||||||:::
Db       6394 AACAGCTCAGGCTGGTTGAGCAACCTTACCTTTAAAGAAGATGTAATTCACCAGAGCAAA 6335

Qy         16 Asn 16
              |||
Db       6334 AAC 6332

RESULT 14
US-09-668-680-8/c
; Sequence 8, Application US/09668680
; Patent No. 6436703
; GENERAL INFORMATION:
;  APPLICANT:  Tang, Y. Tom
;  APPLICANT:  Liu, Chenghua
;  APPLICANT:  Zhou, Ping
;  APPLICANT:  Asundi, Vinod
;  APPLICANT:  Zhang, Jie
;  APPLICANT:  Wang, Jian-Rui
;  APPLICANT:  Xue, Aidong J.
;  APPLICANT:  Xu, Chongjun
;  APPLICANT:  Drmanac, Radoje T.
;  TITLE OF INVENTION:  No. 6436703el Nucleic Acids and
;  TITLE OF INVENTION:  Polypeptides
;  FILE REFERENCE:  790CIP2A
;  CURRENT APPLICATION NUMBER: US/09/668,680
;  CURRENT FILING DATE:  2000-09-22
;  PRIOR APPLICATION NUMBER:  09/649,167
;  PRIOR FILING DATE:  2000-08-23
;  PRIOR APPLICATION NUMBER:  09/540,217
;  PRIOR FILING DATE:  2000-03-31
;  NUMBER OF SEQ ID NOS:  13
;  SOFTWARE:  pt_FL_genes Version 2.0
; SEQ ID NO 8
;   LENGTH: 2763
;   TYPE: DNA
;   ORGANISM: Homo sapiens
;   FEATURE:
;   NAME/KEY: CDS
;   LOCATION: (180)..(1742)
US-09-668-680-8

Alignment Scores:
Pred. No.:                212             Length:         2763
Score:                    44.00           Matches:        8
Percent Similarity:       66.67%          Conservative:   2
Best Local Similarity:    53.33%          Mismatches:     5
Query Match:              52.38%          Indels:         0
DB:                       4               Gaps:           0

US-08-978-217-12 (1-16) x US-09-668-680-8 (1-2763)

Qy          2 AsnSerSerGlyTrpLysGluGluGluValLeuGlnSerArgAsn 16
              :::|||||||||||||||         :::      |||||||||
Db       1342 TCCAGCTCTGGGTGGAAGTCTTCCTCTTTGCCCAGCTCTAGAAAC 1298

RESULT 15
US-09-668-680-6/c
; Sequence 6, Application US/09668680
; Patent No. 6436703
; GENERAL INFORMATION:
;  APPLICANT:  Tang, Y. Tom
;  APPLICANT:  Liu, Chenghua
;  APPLICANT:  Zhou, Ping
;  APPLICANT:  Asundi, Vinod
;  APPLICANT:  Zhang, Jie
;  APPLICANT:  Wang, Jian-Rui
;  APPLICANT:  Xue, Aidong J.
;  APPLICANT:  Xu, Chongjun
;  APPLICANT:  Drmanac, Radoje T.
;  TITLE OF INVENTION:  No. 6436703el Nucleic Acids and
;  TITLE OF INVENTION:  Polypeptides
;  FILE REFERENCE:  790CIP2A
;  CURRENT APPLICATION NUMBER: US/09/668,680
;  CURRENT FILING DATE:  2000-09-22
;  PRIOR APPLICATION NUMBER:  09/649,167
;  PRIOR FILING DATE:  2000-08-23
;  PRIOR APPLICATION NUMBER:  09/540,217
;  PRIOR FILING DATE:  2000-03-31
;  NUMBER OF SEQ ID NOS:  13
;  SOFTWARE:  pt_FL_genes Version 2.0
; SEQ ID NO 6
;   LENGTH: 3396
;   TYPE: DNA
;   ORGANISM: Homo sapiens
;   FEATURE:
;   NAME/KEY: CDS
;   LOCATION: (27)..(2375)
US-09-668-680-6

Alignment Scores:
Pred. No.:                271             Length:         3396
Score:                    44.00           Matches:        8
Percent Similarity:       66.67%          Conservative:   2
Best Local Similarity:    53.33%          Mismatches:     5
Query Match:              52.38%          Indels:         0
DB:                       4               Gaps:           0

US-08-978-217-12 (1-16) x US-09-668-680-6 (1-3396)

Qy          2 AsnSerSerGlyTrpLysGluGluGluValLeuGlnSerArgAsn 16
              :::|||||||||||||||         :::      |||||||||
Db       1975 TCCAGCTCTGGGTGGAAGTCTTCCTCTTTGCCCAGCTCTAGAAAC 1931


Search completed: February 12, 2004, 21:50:03
Job time : 9.03329 secs
```

GenCore version 5.1.6

OM protein - nucleic search, using frame_plus_p2n model

Run on: February 12, 2004, 19:34:21 ; Search time 21.1748 Seconds
(without alignments)
1750.959 Million cell updates/sec

Title: US-08-978-217-7
Perfect score: 445
Sequence: 1 NCALEELRLVFGPLGDQLHA.....ELLDDGQQASPYHPGSCGAG 84

Scoring table: BLOSUM62
Xgapop 10.0 , Xgapext 0.5
Ygapop 10.0 , Ygapext 0.5
Fgapop 6.0 , Fgapext 7.0
Delop 6.0 , Delext 7.0

Searched: 569978 seqs, 220691566 residues

Total number of hits satisfying chosen parameters: 1139956

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Command line parameters:
-MODEL=frame+_p2n.model -DEV=xlh
-Q=/cgn2_1/USPTO_spool/US08978217/runat_10022004_133826_20481/app_query.fasta_1.1500
-DB=Issued_Patents_NA -QFMT=fastap -SUFFIX=rni -MINMATCH=0.1 -LOOPCL=0
-LOOPEXT=0 -UNITS=bits -START=1 -END=-1 -MATRIX=blosum62 -TRANS=human40.cdi
-LIST=45 -DOCALIGN=200 -THR_SCORE=pct -THR_MAX=100 -THR_MIN=0 -ALIGN=15
-MODE=LOCAL -OUTFMT=pto -NORM=ext -HEAPSIZE=500 -MINLEN=0 -MAXLEN=2000000000
-USER=US08978217_@CGN_1_1_115_@runat_10022004_133826_20481 -NCPU=6 -ICPU=3
-NO_MMAP -LARGEQUERY -NEG_SCORES=0 -WAIT -DSPBLOCK=100 -LONGLOG
-DEV_TIMEOUT=120 -WARN_TIMEOUT=30 -THREADS=1 -XGAPOP=10 -XGAPEXT=0.5 -FGAPOP=6
-FGAPEXT=7 -YGAPOP=10 -YGAPEXT=0.5 -DELOP=6 -DELEXT=7

Database : Issued_Patents_NA:*
1: /cgn2_6/ptodata/1/ina/5A_COMB.seq:*
2: /cgn2_6/ptodata/1/ina/5B_COMB.seq:*
3: /cgn2_6/ptodata/1/ina/6A_COMB.seq:*
4: /cgn2_6/ptodata/1/ina/6B_COMB.seq:*
5: /cgn2_6/ptodata/1/ina/PCTUS_COMB.seq:*
6: /cgn2_6/ptodata/1/ina/backfiles1.seq:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.		Score	% Query Match	Length	DB	ID	Description
1		445	100.0	1907	4	US-09-300-958A-27	Sequence 27, Appl
2		445	100.0	1907	4	US-09-570-593-4	Sequence 4, Appli
3		445	100.0	1920	1	US-08-746-789A-1	Sequence 1, Appli
	c 4	73.5	16.5	624	4	US-09-252-991A-13629	Sequence 13629, A
5		73.5	16.5	801	4	US-09-252-991A-13819	Sequence 13819, A
	c 6	72	16.2	521	4	US-09-404-879A-139	Sequence 139, App
	c 7	72	16.2	521	4	US-09-338-933-139	Sequence 139, App
	c 8	72	16.2	521	4	US-09-215-681-139	Sequence 139, App
	c 9	72	16.2	551	4	US-09-404-879A-92	Sequence 92, Appl
	c 10	72	16.2	551	4	US-09-338-933-92	Sequence 92, Appl
	c 11	72	16.2	551	4	US-09-215-681-92	Sequence 92, Appl
	c 12	72	16.2	555	4	US-09-404-879A-107	Sequence 107, App
	c 13	72	16.2	555	4	US-09-338-933-107	Sequence 107, App
	c 14	72	16.2	555	4	US-09-215-681-107	Sequence 107, App
	c 15	72	16.2	2301	1	US-08-306-691B-23	Sequence 23, Appl
	c 16	72	16.2	2301	4	US-09-167-206-3	Sequence 3, Appli
	c 17	72	16.2	2301	5	PCT-US93-06251-78	Sequence 78, Appl
18		71.5	16.1	3141	2	US-08-956-242-1	Sequence 1, Appli
19		71.5	16.1	3141	3	US-09-351-215-1	Sequence 1, Appli
	c 20	67.5	15.2	1011	4	US-09-252-991A-7550	Sequence 7550, Ap
21		67.5	15.2	1062	4	US-09-252-991A-7788	Sequence 7788, Ap
22		66.5	14.9	534	4	US-09-252-991A-12113	Sequence 12113, A
23		66.5	14.9	624	4	US-09-252-991A-12252	Sequence 12252, A
24		66.5	14.9	849	4	US-09-252-991A-11100	Sequence 11100, A
	c 25	66.5	14.9	852	4	US-09-252-991A-10964	Sequence 10964, A
26		66.5	14.9	1473	4	US-09-518-914-7	Sequence 7, Appli
	c 27	66	14.8	1594	2	US-08-955-713-1	Sequence 1, Appli
28		66	14.8	4154	1	US-08-131-365B-37	Sequence 37, Appl
29		66	14.8	4154	2	US-08-668-123-37	Sequence 37, Appl
30		65.5	14.7	444	4	US-09-252-991A-7864	Sequence 7864, Ap
	c 31	65.5	14.7	111282	4	US-09-754-250-3	Sequence 3, Appli
32		64.5	14.5	576	4	US-09-252-991A-7380	Sequence 7380, Ap
	c 33	64.5	14.5	756	4	US-09-252-991A-7245	Sequence 7245, Ap
34		64.5	14.5	915	4	US-09-252-991A-7455	Sequence 7455, Ap
35		64.5	14.5	3546	1	US-08-162-809-9	Sequence 9, Appli
36		64.5	14.5	3591	1	US-08-162-809-13	Sequence 13, Appl
	c 37	64.5	14.5	3807	1	US-08-357-598-1	Sequence 1, Appli
	c 38	64.5	14.5	3807	2	US-09-003-289-1	Sequence 1, Appli
	c 39	64.5	14.5	3807	5	PCT-US95-16435-1	Sequence 1, Appli
40		64	14.4	3805	4	US-09-220-132-9	Sequence 9, Appli
41		64	14.4	32207	2	US-08-770-379-20	Sequence 20, Appl
42		64	14.4	32207	3	US-08-757-669A-20	Sequence 20, Appl
43		64	14.4	32207	4	US-09-230-371A-20	Sequence 20, Appl
44		63.5	14.3	1575	4	US-09-134-001C-516	Sequence 516, App
45		63.5	14.3	3103	4	US-09-268-480-10	Sequence 10, Appl

ALIGNMENTS

RESULT 1
US-09-300-958A-27
; Sequence 27, Application US/09300958A
; Patent No. 6495319
; GENERAL INFORMATION:
; APPLICANT: McClelland, Michael
; APPLICANT: Welsh, John
; APPLICANT: Trenkle, Thomas
; TITLE OF INVENTION: Reduced Complexity Nucleic Acid Targets and Methods of
; TITLE OF INVENTION: Using Same
; FILE REFERENCE: P-PH 3457
; CURRENT APPLICATION NUMBER: US/09/300,958A
; CURRENT FILING DATE: 1999-04-27
; PRIOR APPLICATION NUMBER: 60/083,331
; PRIOR FILING DATE: 1998-04-27
; PRIOR APPLICATION NUMBER: 60/098,070
; PRIOR FILING DATE: 1998-08-27
; PRIOR APPLICATION NUMBER: 60/118,624
; PRIOR FILING DATE: 1999-02-04
; NUMBER OF SEQ ID NOS: 85
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 27
; LENGTH: 1907
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-300-958A-27

Alignment Scores:

Pred. No.:	9.25e-51	Length:	1907
Score:	445.00	Matches:	84
Percent Similarity:	100.00%	Conservative:	0
Best Local Similarity:	100.00%	Mismatches:	0
Query Match:	100.00%	Indels:	0
DB:	4	Gaps:	0

US-08-978-217-7 (1-84) x US-09-300-958A-27 (1-1907)

```
Qy          1 AsnCysAlaLeuGluGluLeuArgLeuValPheGlyProLeuGlyAspGlnLeuHisAla 20
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        405 AATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGCCTCTGGGGGACCAACTCCATGCC 464

Qy         21 GlnLeuArgAspLeuThrSerSerSerSerAspGluLeuSerTrpIleIleGluLeuLeu 40
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        465 CAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATTGAGCTGCTG 524

Qy         41 GluLysAspGlyMetAlaPheGlnGluAlaLeuAspProGlyProPheAspGlnGlySer 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        525 GAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCCTTTGACCAGGGCAGC 584

Qy         61 ProPheAlaGlnGluLeuLeuAspAspGlyGlnGlnAlaSerProTyrHisProGlySer 80
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        585 CCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCACCCCGGCAGC 644

Qy         81 CysGlyAlaGly 84
              ||||||||||||
Db        645 TGTGGCGCAGGA 656
```

RESULT 2
US-09-570-593-4
; Sequence 4, Application US/09570593
; Patent No. 6566063
; GENERAL INFORMATION:
; APPLICANT: Kaufmann, Joerg
; APPLICANT: Xin, Hong
; APPLICANT: Harrowe, Greg
; TITLE OF INVENTION: EXPRESSION OF ETS-DOMAIN PROTEINS IN
; TITLE OF INVENTION: CANCER
; FILE REFERENCE: 2300-1556
; CURRENT APPLICATION NUMBER: US/09/570,593
; CURRENT FILING DATE: 2000-05-12
; PRIOR APPLICATION NUMBER: 60/134,112
; PRIOR FILING DATE: 1999-05-14
; NUMBER OF SEQ ID NOS: 13
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 4
; LENGTH: 1907
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (96)...(1211)
; OTHER INFORMATION: Human epithelial-restricted with serine box (ESX)
; OTHER INFORMATION: protein.
US-09-570-593-4

Alignment Scores:			
Pred. No.:	9.25e-51	Length:	1907
Score:	445.00	Matches:	84
Percent Similarity:	100.00%	Conservative:	0
Best Local Similarity:	100.00%	Mismatches:	0
Query Match:	100.00%	Indels:	0
DB:	4	Gaps:	0

US-08-978-217-7 (1-84) x US-09-570-593-4 (1-1907)

```
Qy          1 AsnCysAlaLeuGluGluLeuArgLeuValPheGlyProLeuGlyAspGlnLeuHisAla 20
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        405 AATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGCCTCTGGGGGACCAACTCCATGCC 464

Qy         21 GlnLeuArgAspLeuThrSerSerSerSerAspGluLeuSerTrpIleIleGluLeuLeu 40
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        465 CAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATTGAGCTGCTG 524

Qy         41 GluLysAspGlyMetAlaPheGlnGluAlaLeuAspProGlyProPheAspGlnGlySer 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        525 GAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCCTTTGACCAGGGCAGC 584

Qy         61 ProPheAlaGlnGluLeuLeuAspAspGlyGlnGlnAlaSerProTyrHisProGlySer 80
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        585 CCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCACCCCGGCAGC 644

Qy         81 CysGlyAlaGly 84
              ||||||||||||
Db        645 TGTGGCGCAGGA 656
```

RESULT 3
US-08-746-789A-1
; Sequence 1, Application US/08746789A
; Patent No. 5789200
; GENERAL INFORMATION:
; APPLICANT: Ismail Kola, Martin J. Tymms, Christine DeBouck
; TITLE OF INVENTION: A No. 5789200el Human ETS Family Member, ELF3
; NUMBER OF SEQUENCES: 4
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: SmithKline Beecham Corporation
; STREET: 709 Swedeland Road, P.O. Box 1539
; CITY: King of Prussia
; STATE: PA
; COUNTRY: USA
; ZIP: 19406-0939
; COMPUTER READABLE FORM:
; MEDIUM TYPE: DISKETTE, 3.5 INCH, 1.44 Mb STORAGE
; COMPUTER: IBM 486
; OPERATING SYSTEM: WINDOWS FOR WORKGROUPS
; SOFTWARE: MICROSOFT WORD
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/746,789A
; FILING DATE: No. 5789200ember 15, 1996
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER:
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: William T. Han
; REGISTRATION NUMBER: 34,344
; REFERENCE/DOCKET NUMBER: ATG 50024
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 610 270 5219
; TELEFAX: 610 270 4026
; INFORMATION FOR SEQ ID NO: 1:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 1920
; TYPE: Nucleic Acid
; STRANDEDNESS: Single
; TOPOLOGY: Linear
; ANTI-SENSE: No
US-08-746-789A-1

Alignment Scores:			
Pred. No.:	9.33e-51	Length:	1920
Score:	445.00	Matches:	84
Percent Similarity:	100.00%	Conservative:	0
Best Local Similarity:	100.00%	Mismatches:	0
Query Match:	100.00%	Indels:	0
DB:	1	Gaps:	0

US-08-978-217-7 (1-84) x US-08-746-789A-1 (1-1920)

```
Qy          1 AsnCysAlaLeuGluGluLeuArgLeuValPheGlyProLeuGlyAspGlnLeuHisAla 20
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        424 AATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGCCTCTGGGGGACCAACTCCATGCC 483

Qy         21 GlnLeuArgAspLeuThrSerSerSerSerAspGluLeuSerTrpIleIleGluLeuLeu 40
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        484 CAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATTGAGCTGCTG 543

Qy         41 GluLysAspGlyMetAlaPheGlnGluAlaLeuAspProGlyProPheAspGlnGlySer 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        544 GAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCCTTTGACCAGGGCAGC 603

Qy         61 ProPheAlaGlnGluLeuLeuAspAspGlyGlnGlnAlaSerProTyrHisProGlySer 80
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
```

```
Db        604 CCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCACCCCGGCAGC 663

Qy         81 CysGlyAlaGly 84
              ||||||||||||
Db        664 TGTGGCGCAGGA 675
```

RESULT 4
US-09-252-991A-13629/c
; Sequence 13629, Application US/09252991A
; Patent No. 6551795
; GENERAL INFORMATION:
; APPLICANT: Marc J. Rubenfield et al.
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
; TITLE OF INVENTION: AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
; FILE REFERENCE: 107196.136
; CURRENT APPLICATION NUMBER: US/09/252,991A
; CURRENT FILING DATE: 1999-02-18
; PRIOR APPLICATION NUMBER: US 60/074,788
; PRIOR FILING DATE: 1998-02-18
; PRIOR APPLICATION NUMBER: US 60/094,190
; PRIOR FILING DATE: 1998-07-27
; NUMBER OF SEQ ID NOS: 33142
; SEQ ID NO 13629
; LENGTH: 624
; TYPE: DNA
; ORGANISM: Pseudomonas aeruginosa
US-09-252-991A-13629

Alignment Scores:

Pred. No.:	0.486	Length:	624
Score:	73.50	Matches:	26
Percent Similarity:	47.95%	Conservative:	9
Best Local Similarity:	35.62%	Mismatches:	19
Query Match:	16.52%	Indels:	19
DB:	4	Gaps:	4

US-08-978-217-7 (1-84) x US-09-252-991A-13629 (1-624)

```
Qy         12 GlyProLeuGlyAspGlnLeuHisAlaGlnLeuArgAspLeuThrSerSerSerSerAsp 31
              |||   |||  ||||||||||||   :::   |||   |||
Db        165 GGAGTACTTGCCGATCAGTTGCATCGCCGTCGCCGCGGCCTT------------------ 124

Qy         32 GluLeuSerTrpIleIleGluLeuLeuGluLysAspGlyMetAlaPheGlnGluAlaLeu 51
                |||:::   ::::::   :::   :::   |||   :::|||   |||       |||
Db        123 CATCTCGCAGGCCTTGTG---GTCCAGCAGCATGACGTCCTGGCGCTCCAGGGCCGCCTC 67

Qy         52 AspProGlyProPheAspGlnGlySerProPheAlaGlnGluLeuLeuAspAspGlyGln 71
              |||||||||           ||||||          :::||||||:::|||   ||||||
Db         66 GACCCAGGC---------GGCGGGAGTGGAACAGGCAAGGAATTGGTCGATCTCGGGCAA 16

Qy         72 GlnAlaSerProTyrHisProGlySerCysGlyAlaGly 84
                                    |||||||||
Db         15 CAT--------------------------GGTGCAGGT 4
```

RESULT 5
US-09-252-991A-13819
; Sequence 13819, Application US/09252991A
; Patent No. 6551795
; GENERAL INFORMATION:
; APPLICANT: Marc J. Rubenfield et al.
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
; TITLE OF INVENTION: AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
; FILE REFERENCE: 107196.136
; CURRENT APPLICATION NUMBER: US/09/252,991A
; CURRENT FILING DATE: 1999-02-18
; PRIOR APPLICATION NUMBER: US 60/074,788
; PRIOR FILING DATE: 1998-02-18
; PRIOR APPLICATION NUMBER: US 60/094,190
; PRIOR FILING DATE: 1998-07-27
; NUMBER OF SEQ ID NOS: 33142
; SEQ ID NO 13819
; LENGTH: 801
; TYPE: DNA
; ORGANISM: Pseudomonas aeruginosa
US-09-252-991A-13819

Alignment Scores:

Pred. No.:	0.679	Length:	801
Score:	73.50	Matches:	26
Percent Similarity:	47.95%	Conservative:	9
Best Local Similarity:	35.62%	Mismatches:	19
Query Match:	16.52%	Indels:	19
DB:	4	Gaps:	4

US-08-978-217-7 (1-84) x US-09-252-991A-13819 (1-801)

```
Qy         12 GlyProLeuGlyAspGlnLeuHisAlaGlnLeuArgAspLeuThrSerSerSerSerAsp 31
              |||   |||  ||||||||||||   :::   |||   |||
Db        508 GGAGTACTTGCCGATCAGTTGCATCGCCGTCGCCGCGGCCTT------------------ 549

Qy         32 GluLeuSerTrpIleIleGluLeuLeuGluLysAspGlyMetAlaPheGlnGluAlaLeu 51
                |||:::   ::::::   :::   :::   |||   :::|||   |||       |||
Db        550 CATCTCGCAGGCCTTGTG---GTCCAGCAGCATGACGTCCTGGCGCTCCAGGGCCGCCTC 606

Qy         52 AspProGlyProPheAspGlnGlySerProPheAlaGlnGluLeuLeuAspAspGlyGln 71
              |||||||||           ||||||          :::||||||:::|||   ||||||
Db        607 GACCCAGGC---------GGCGGGAGTGGAACAGGCAAGGAATTGGTCGATCTCGGGCAA 657

Qy         72 GlnAlaSerProTyrHisProGlySerCysGlyAlaGly 84
                                    |||||||||
Db        658 CAT--------------------------GGTGCAGGT 669
```

RESULT 6
US-09-404-879A-139/c
; Sequence 139, Application US/09404879A
; Patent No. 6468546
; GENERAL INFORMATION:
; APPLICANT: Mitcham, Jennifer L.
; APPLICANT: King, Gordon E.
; APPLICANT: Algate, Paul A.
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY AND
; TITLE OF INVENTION: DIAGNOSIS OF OVARIAN CANCER
; FILE REFERENCE: 210121.462C2
; CURRENT APPLICATION NUMBER: US/09/404,879A
; CURRENT FILING DATE: 1999-09-24
; NUMBER OF SEQ ID NOS: 393
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 139
; LENGTH: 521
; TYPE: DNA
; ORGANISM: Homo sapien
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (1)...(521)
; OTHER INFORMATION: n = A,T,C or G
US-09-404-879A-139

Alignment Scores:

Pred. No.:	0.61	Length:	521
Score:	72.00	Matches:	31
Percent Similarity:	39.81%	Conservative:	10
Best Local Similarity:	30.10%	Mismatches:	32
Query Match:	16.18%	Indels:	31
DB:	4	Gaps:	5

US-08-978-217-7 (1-84) x US-09-404-879A-139 (1-521)

```
Qy          6 GluLeuArgLeuValPhe---------GlyProLeuGlyAspGlnLeuHisAlaGlnLeu 22
              |||     |||   |||         ||||||:::   :::   ||||||      |||
Db        333 GAGTTCCATCTTTTCTTCATCTTTTAAGGCCCGGTTTTCAATAACCTTCATACCTCTCTC 274

Qy         23 ArgAspLeuThrSerSerSerSerAspGluLeuSerTrpIleIleGluLeuLeuGluLys 42
                  ::::::|||       |||                        :::||||||:::
Db        273 ACTCTCATCAGCAGCTTTTTCAGC--------------TTCTTCCAGCTTTTGCAGGGC 229

Qy         43 AspGlyMetAla--------------------PheGlnGluAlaLeuAspProGly--- 54
```

```
Db        228 AGTGGCCAGGCGCTCCTGAGCACGGTCCAGCTCTTCTTCAACCAGCTGGATCCTACGGTT 169

Qy         55 ----------------------ProPheAspGlnGlySerProPheAlaGlnGluLeuLeu 67

Db        168 CAAGGAGGCCACCTCAGCCTCAGCCTGTTCCCGGGCCCGCCTTTCTCCCT-CAACTTCTC 110

Qy         68 AspAspGlyGlnGlnAlaSerProTyrHis----------------------ProGlySer 80

Db        109 GCTGGAGGCGCTCAGCTCGCTCCTCTGCATCATCTGCCTGCTGCTGCAGAACCTGGATCT 50

Qy         81 CysGlyAla 83

Db         49 TGCGCTTCA 41

RESULT 7
US-09-338-933-139/c
; Sequence 139, Application US/09338933
; Patent No. 6488931
; GENERAL INFORMATION:
;  APPLICANT: Mitcham, Jennifer Lynn
;  APPLICANT: King, Gordon E.
;  TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THERAPY OF
;  TITLE OF INVENTION: OVARIAN CANCER
;  FILE REFERENCE: 210121.462C1
;  CURRENT APPLICATION NUMBER: US/09/338,933
;  CURRENT FILING DATE: 1999-06-23
;  NUMBER OF SEQ ID NOS: 312
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 139
;   LENGTH: 521
;   TYPE: DNA
;   ORGANISM: Homo sapien
;   FEATURE:
;   NAME/KEY: misc_feature
;   LOCATION: (1)...(521)
;   OTHER INFORMATION: n = A,T,C or G
US-09-338-933-139

Alignment Scores:
Pred. No.:               0.61          Length:          521
Score:                   72.00         Matches:         31
Percent Similarity:      39.81%        Conservative:    10
Best Local Similarity:   30.10%        Mismatches:      32
Query Match:             16.18%        Indels:          31
DB:                      4             Gaps:            5

US-08-978-217-7 (1-84) x US-09-338-933-139 (1-521)

Qy          6 GluLeuArgLeuValPhe---------GlyProLeuGlyAspGlnLeuHisAlaGlnLeu 22

Db        333 GAGTTCCATCTTTTCTTCATCTTTTAAGGCCCGGTTTTCAATAACCTTCATACCTCTCTC 274

Qy         23 ArgAspLeuThrSerSerSerSerAspGluLeuSerTrpIleIleGluLeuLeuGluLys 42

Db        273 ACTCTCATCAGCAGCTTTTTCAGC--------------TTCTTCCAGCTTTTGCAGGGC 229

Qy         43 AspGlyMetAla----------------------PheGlnGluAlaLeuAspProGly--- 54

Db        228 AGTGGCCAGGCGCTCCTGAGCACGGTCCAGCTCTTCTTCAACCAGCTGGATCCTACGGTT 169

Qy         55 ----------------------ProPheAspGlnGlySerProPheAlaGlnGluLeuLeu 67

Db        168 CAAGGAGGCCACCTCAGCCTCAGCCTGTTCCCGGGCCCGCCTTTCTCCCT-CAACTTCTC 110

Qy         68 AspAspGlyGlnGlnAlaSerProTyrHis----------------------ProGlySer 80

Db        109 GCTGGAGGCGCTCAGCTCGCTCCTCTGCATCATCTGCCTGCTGCTGCAGAACCTGGATCT 50

Qy         81 CysGlyAla 83

Db         49 TGCGCTTCA 41

RESULT 8
US-09-215-681-139/c
; Sequence 139, Application US/09215681A
; Patent No. 6528253
; GENERAL INFORMATION:
;  APPLICANT: Mitcham, Jennifer L.
;  APPLICANT: Frudakis, Tony N.
;  APPLICANT: King, Gordon E.
;  TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR DIAGNOSIS
;  TITLE OF INVENTION: OF OVARIAN CANCER
;  FILE REFERENCE: 210121.463
;  CURRENT APPLICATION NUMBER: US/09/215,681A
;  CURRENT FILING DATE: 1998-12-17
;  NUMBER OF SEQ ID NOS: 310
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 139
;   LENGTH: 521
;   TYPE: DNA
;   ORGANISM: Homo sapien
;   FEATURE:
;   NAME/KEY: misc_feature
;   LOCATION: (1)...(521)
;   OTHER INFORMATION: n = A,T,C or G
US-09-215-681-139

Alignment Scores:
Pred. No.:               0.61          Length:          521
Score:                   72.00         Matches:         31
Percent Similarity:      39.81%        Conservative:    10
Best Local Similarity:   30.10%        Mismatches:      32
Query Match:             16.18%        Indels:          31
DB:                      4             Gaps:            5

US-08-978-217-7 (1-84) x US-09-215-681-139 (1-521)

Qy          6 GluLeuArgLeuValPhe---------GlyProLeuGlyAspGlnLeuHisAlaGlnLeu 22

Db        333 GAGTTCCATCTTTTCTTCATCTTTTAAGGCCCGGTTTTCAATAACCTTCATACCTCTCTC 274

Qy         23 ArgAspLeuThrSerSerSerSerAspGluLeuSerTrpIleIleGluLeuLeuGluLys 42

Db        273 ACTCTCATCAGCAGCTTTTTCAGC--------------TTCTTCCAGCTTTTGCAGGGC 229

Qy         43 AspGlyMetAla----------------------PheGlnGluAlaLeuAspProGly--- 54

Db        228 AGTGGCCAGGCGCTCCTGAGCACGGTCCAGCTCTTCTTCAACCAGCTGGATCCTACGGTT 169

Qy         55 ----------------------ProPheAspGlnGlySerProPheAlaGlnGluLeuLeu 67

Db        168 CAAGGAGGCCACCTCAGCCTCAGCCTGTTCCCGGGCCCGCCTTTCTCCCT-CAACTTCTC 110

Qy         68 AspAspGlyGlnGlnAlaSerProTyrHis----------------------ProGlySer 80

Db        109 GCTGGAGGCGCTCAGCTCGCTCCTCTGCATCATCTGCCTGCTGCTGCAGAACCTGGATCT 50

Qy         81 CysGlyAla 83

Db         49 TGCGCTTCA 41

RESULT 9
US-09-404-879A-92/c
; Sequence 92, Application US/09404879A
; Patent No. 6468546
; GENERAL INFORMATION:
;  APPLICANT:  Mitcham, Jennifer L.
;  APPLICANT:  King, Gordon E.
;  APPLICANT:  Algate, Paul A.
;  TITLE OF INVENTION:  COMPOSITIONS AND METHODS FOR THE THERAPY AND
;  TITLE OF INVENTION:  DIAGNOSIS OF OVARIAN CANCER
;  FILE REFERENCE:  210121.462C2
;  CURRENT APPLICATION NUMBER: US/09/404,879A
;  CURRENT FILING DATE:  1999-09-24
;  NUMBER OF SEQ ID NOS:  393
```

```
;  SOFTWARE:  FastSEQ for Windows Version 3.0
; SEQ ID NO 92
;   LENGTH: 551
;   TYPE: DNA
;   ORGANISM: Homo sapien
US-09-404-879A-92

Alignment Scores:
Pred. No.:                0.657          Length:          551
Score:                    72.00          Matches:         31
Percent Similarity:       39.81%         Conservative:    10
Best Local Similarity:    30.10%         Mismatches:      32
Query Match:              16.18%         Indels:          31
DB:                       4              Gaps:            5

US-08-978-217-7 (1-84) x US-09-404-879A-92 (1-551)

Qy          6 GluLeuArgLeuValPhe---------GlyProLeuGlyAspGlnLeuHisAlaGlnLeu 22
              |||       |||   |||          ||||||:::   :::   ||||||      |||
Db        354 GAGTTCCATCTTTTCTTCATCTTTTAAGGCCCGGTTTTCAATAACCTTCATACCTCTCTC 295

Qy         23 ArgAspLeuThrSerSerSerSerAspGluLeuSerTrpIleIleGluLeuLeuGluLys 42
                :::::::|||       |||                          :::|||||||:::
Db        294 ACTCTCATCAGCAGCTTTTTCAGC--------------TTCTTCCAGCTTTTGCAGGGC 250

Qy         43 AspGlyMetAla--------------------PheGlnGluAlaLeuAspProGly--- 54
              |||   |||                       |||          |||||||||
Db        249 AGTGGCCAGGCGCTCCTGAGCACGGTCCAGCTCTTCTTCAACCAGCTGGATCCTACGGTT 190

Qy         55 ---------------------ProPheAspGlnGlySerProPheAlaGlnGluLeuLeu 67
                                   |||   ||||||:::   :::|||||
Db        189 CAAGGAGGCCACCTCAGCCTCAGCCTGTTCCCGGGCCCGCCTTTCTCCCT-CAACTTCTC 131

Qy         68 AspAspGlyGlnGlnAlaSerProTyrHis--------------------ProGlySer 80
              |||   |||   :::|||   |||                         |||||||||
Db        130 GCTGGAGGCGCTCAGCTCGCTCCTCTGCATCATCTGCCTGCTGCTGCAGAACCTGGATCT 71

Qy         81 CysGlyAla 83
              |||   :::
Db         70 TGCGCTTCA 62

RESULT 10
US-09-338-933-92/c
; Sequence 92, Application US/09338933
; Patent No. 6488931
; GENERAL INFORMATION:
;  APPLICANT: Mitcham, Jennifer Lynn
;  APPLICANT: King, Gordon E.
;  TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THERAPY OF
;  TITLE OF INVENTION: OVARIAN CANCER
;  FILE REFERENCE: 210121.462C1
;  CURRENT APPLICATION NUMBER: US/09/338,933
;  CURRENT FILING DATE: 1999-06-23
;  NUMBER OF SEQ ID NOS: 312
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 92
;   LENGTH: 551
;   TYPE: DNA
;   ORGANISM: Homo sapien
US-09-338-933-92

Alignment Scores:
Pred. No.:                0.657          Length:          551
Score:                    72.00          Matches:         31
Percent Similarity:       39.81%         Conservative:    10
Best Local Similarity:    30.10%         Mismatches:      32
Query Match:              16.18%         Indels:          31
DB:                       4              Gaps:            5

US-08-978-217-7 (1-84) x US-09-338-933-92 (1-551)

Qy          6 GluLeuArgLeuValPhe---------GlyProLeuGlyAspGlnLeuHisAlaGlnLeu 22
              |||       |||   |||          ||||||:::   :::   ||||||      |||
Db        354 GAGTTCCATCTTTTCTTCATCTTTTAAGGCCCGGTTTTCAATAACCTTCATACCTCTCTC 295

Qy         23 ArgAspLeuThrSerSerSerSerAspGluLeuSerTrpIleIleGluLeuLeuGluLys 42
                :::::::|||       |||                          :::|||||||:::
Db        294 ACTCTCATCAGCAGCTTTTTCAGC--------------TTCTTCCAGCTTTTGCAGGGC 250

Qy         43 AspGlyMetAla--------------------PheGlnGluAlaLeuAspProGly--- 54
              |||   |||                       |||          |||||||||
Db        249 AGTGGCCAGGCGCTCCTGAGCACGGTCCAGCTCTTCTTCAACCAGCTGGATCCTACGGTT 190

Qy         55 ---------------------ProPheAspGlnGlySerProPheAlaGlnGluLeuLeu 67
                                   |||   ||||||:::   :::|||||
Db        189 CAAGGAGGCCACCTCAGCCTCAGCCTGTTCCCGGGCCCGCCTTTCTCCCT-CAACTTCTC 131

Qy         68 AspAspGlyGlnGlnAlaSerProTyrHis--------------------ProGlySer 80
              |||   |||   :::|||   |||                         |||||||||
Db        130 GCTGGAGGCGCTCAGCTCGCTCCTCTGCATCATCTGCCTGCTGCTGCAGAACCTGGATCT 71

Qy         81 CysGlyAla 83
              |||   :::
Db         70 TGCGCTTCA 62

RESULT 11
US-09-215-681-92/c
; Sequence 92, Application US/09215681A
; Patent No. 6528253
; GENERAL INFORMATION:
;  APPLICANT: Mitcham, Jennifer L.
;  APPLICANT: Frudakis, Tony N.
;  APPLICANT: King, Gordon E.
;  TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR DIAGNOSIS
;  TITLE OF INVENTION: OF OVARIAN CANCER
;  FILE REFERENCE: 210121.463
;  CURRENT APPLICATION NUMBER: US/09/215,681A
;  CURRENT FILING DATE: 1998-12-17
;  NUMBER OF SEQ ID NOS: 310
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 92
;   LENGTH: 551
;   TYPE: DNA
;   ORGANISM: Homo sapien
US-09-215-681-92

Alignment Scores:
Pred. No.:                0.657          Length:          551
Score:                    72.00          Matches:         31
Percent Similarity:       39.81%         Conservative:    10
Best Local Similarity:    30.10%         Mismatches:      32
Query Match:              16.18%         Indels:          31
DB:                       4              Gaps:            5

US-08-978-217-7 (1-84) x US-09-215-681-92 (1-551)

Qy          6 GluLeuArgLeuValPhe---------GlyProLeuGlyAspGlnLeuHisAlaGlnLeu 22
              |||       |||   |||          ||||||:::   :::   ||||||      |||
Db        354 GAGTTCCATCTTTTCTTCATCTTTTAAGGCCCGGTTTTCAATAACCTTCATACCTCTCTC 295

Qy         23 ArgAspLeuThrSerSerSerSerAspGluLeuSerTrpIleIleGluLeuLeuGluLys 42
                :::::::|||       |||                          :::|||||||:::
Db        294 ACTCTCATCAGCAGCTTTTTCAGC--------------TTCTTCCAGCTTTTGCAGGGC 250

Qy         43 AspGlyMetAla--------------------PheGlnGluAlaLeuAspProGly--- 54
              |||   |||                       |||          |||||||||
Db        249 AGTGGCCAGGCGCTCCTGAGCACGGTCCAGCTCTTCTTCAACCAGCTGGATCCTACGGTT 190

Qy         55 ---------------------ProPheAspGlnGlySerProPheAlaGlnGluLeuLeu 67
                                   |||   ||||||:::   :::|||||
Db        189 CAAGGAGGCCACCTCAGCCTCAGCCTGTTCCCGGGCCCGCCTTTCTCCCT-CAACTTCTC 131

Qy         68 AspAspGlyGlnGlnAlaSerProTyrHis--------------------ProGlySer 80
              |||   |||   :::|||   |||                         |||||||||
Db        130 GCTGGAGGCGCTCAGCTCGCTCCTCTGCATCATCTGCCTGCTGCTGCAGAACCTGGATCT 71
```

```
Qy          81 CysGlyAla 83
               |||   :::
Db          70 TGCGCTTCA 62

RESULT 12
US-09-404-879A-107/c
; Sequence 107, Application US/09404879A
; Patent No. 6468546
; GENERAL INFORMATION:
;  APPLICANT:  Mitcham, Jennifer L.
;  APPLICANT:  King, Gordon E.
;  APPLICANT:  Algate, Paul A.
;  TITLE OF INVENTION:  COMPOSITIONS AND METHODS FOR THE THERAPY AND
;  TITLE OF INVENTION:  DIAGNOSIS OF OVARIAN CANCER
;  FILE REFERENCE:  210121.462C2
;  CURRENT APPLICATION NUMBER: US/09/404,879A
;  CURRENT FILING DATE:  1999-09-24
;  NUMBER OF SEQ ID NOS:  393
;  SOFTWARE:  FastSEQ for Windows Version 3.0
; SEQ ID NO 107
;   LENGTH: 555
;   TYPE: DNA
;   ORGANISM: Homo sapien
US-09-404-879A-107

Alignment Scores:
Pred. No.:                0.663          Length:          555
Score:                    72.00          Matches:         31
Percent Similarity:       39.81%         Conservative:    10
Best Local Similarity:    30.10%         Mismatches:      32
Query Match:              16.18%         Indels:          31
DB:                       4              Gaps:            5

US-08-978-217-7 (1-84) x US-09-404-879A-107 (1-555)

Qy           6 GluLeuArgLeuValPhe---------GlyProLeuGlyAspGlnLeuHisAlaGlnLeu 22
               |||      |||   |||         ||||||:::   :::   ||||||      |||
Db         358 GAGTTCCATCTTTTCTTCATCTTTTAAGGCCCGGTTTTCAATAACCTTCATACCTCTCTC 299

Qy          23 ArgAspLeuThrSerSerSerSerAspGluLeuSerTrpIleIleGluLeuLeuGluLys 42
                 ::::::|||       |||                    :::||||||:::
Db         298 ACTCTCATCAGCAGCTTTTTCAGC--------------TTCTTCCAGCTTTTGCAGGGC 254

Qy          43 AspGlyMetAla--------------------PheGlnGluAlaLeuAspProGly--- 54
               |||   |||                     |||         |||||||||
Db         253 AGTGGCCAGGCGCTCCTGAGCACGGTCCAGCTCTTCTTCAACCAGCTGGATCCTACGGTT 194

Qy          55 ---------------------ProPheAspGlnGlySerProPheAlaGlnGluLeuLeu 67
                                       |||   ||||||:::   :::||||||
Db         193 CAAGGAGGCCACCTCAGCCTCAGCCTGTTCCCGGGCCCGCCTTTCTCCCT-CAACTTCTC 135

Qy          68 AspAspGlyGlnGlnAlaSerProTyrHis---------------------ProGlySer 80
               |||   |||   :::|||   |||                        |||||||||
Db         134 GCTGGAGGCGCTCAGCTCGCTCCTCTGCATCATCTGCCTGCTGCTGCAGAACCTGGATCT 75

Qy          81 CysGlyAla 83
               |||   :::
Db          74 TGCGCTTCA 66

RESULT 13
US-09-338-933-107/c
; Sequence 107, Application US/09338933
; Patent No. 6488931
; GENERAL INFORMATION:
;  APPLICANT: Mitcham, Jennifer Lynn
;  APPLICANT: King, Gordon E.
;  TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THERAPY OF
;  TITLE OF INVENTION: OVARIAN CANCER
;  FILE REFERENCE: 210121.462C1
;  CURRENT APPLICATION NUMBER: US/09/338,933
;  CURRENT FILING DATE: 1999-06-23
;  NUMBER OF SEQ ID NOS: 312
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 107
;   LENGTH: 555
;   TYPE: DNA
;   ORGANISM: Homo sapien
US-09-338-933-107

Alignment Scores:
Pred. No.:                0.663          Length:          555
Score:                    72.00          Matches:         31
Percent Similarity:       39.81%         Conservative:    10
Best Local Similarity:    30.10%         Mismatches:      32
Query Match:              16.18%         Indels:          31
DB:                       4              Gaps:            5

US-08-978-217-7 (1-84) x US-09-338-933-107 (1-555)

Qy           6 GluLeuArgLeuValPhe---------GlyProLeuGlyAspGlnLeuHisAlaGlnLeu 22
               |||      |||   |||         ||||||:::   :::   ||||||      |||
Db         358 GAGTTCCATCTTTTCTTCATCTTTTAAGGCCCGGTTTTCAATAACCTTCATACCTCTCTC 299

Qy          23 ArgAspLeuThrSerSerSerSerAspGluLeuSerTrpIleIleGluLeuLeuGluLys 42
                 ::::::|||       |||                    :::||||||:::
Db         298 ACTCTCATCAGCAGCTTTTTCAGC--------------TTCTTCCAGCTTTTGCAGGGC 254

Qy          43 AspGlyMetAla--------------------PheGlnGluAlaLeuAspProGly--- 54
               |||   |||                     |||         |||||||||
Db         253 AGTGGCCAGGCGCTCCTGAGCACGGTCCAGCTCTTCTTCAACCAGCTGGATCCTACGGTT 194

Qy          55 ---------------------ProPheAspGlnGlySerProPheAlaGlnGluLeuLeu 67
                                       |||   ||||||:::   :::||||||
Db         193 CAAGGAGGCCACCTCAGCCTCAGCCTGTTCCCGGGCCCGCCTTTCTCCCT-CAACTTCTC 135

Qy          68 AspAspGlyGlnGlnAlaSerProTyrHis---------------------ProGlySer 80
               |||   |||   :::|||   |||                        |||||||||
Db         134 GCTGGAGGCGCTCAGCTCGCTCCTCTGCATCATCTGCCTGCTGCTGCAGAACCTGGATCT 75

Qy          81 CysGlyAla 83
               |||   :::
Db          74 TGCGCTTCA 66

RESULT 14
US-09-215-681-107/c
; Sequence 107, Application US/09215681A
; Patent No. 6528253
; GENERAL INFORMATION:
;  APPLICANT: Mitcham, Jennifer L.
;  APPLICANT: Frudakis, Tony N.
;  APPLICANT: King, Gordon E.
;  TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR DIAGNOSIS
;  TITLE OF INVENTION: OF OVARIAN CANCER
;  FILE REFERENCE: 210121.463
;  CURRENT APPLICATION NUMBER: US/09/215,681A
;  CURRENT FILING DATE: 1998-12-17
;  NUMBER OF SEQ ID NOS: 310
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 107
;   LENGTH: 555
;   TYPE: DNA
;   ORGANISM: Homo sapien
US-09-215-681-107

Alignment Scores:
Pred. No.:                0.663          Length:          555
Score:                    72.00          Matches:         31
Percent Similarity:       39.81%         Conservative:    10
Best Local Similarity:    30.10%         Mismatches:      32
Query Match:              16.18%         Indels:          31
DB:                       4              Gaps:            5

US-08-978-217-7 (1-84) x US-09-215-681-107 (1-555)

Qy           6 GluLeuArgLeuValPhe---------GlyProLeuGlyAspGlnLeuHisAlaGlnLeu 22
               |||      |||   |||         ||||||:::   :::   ||||||      |||
```

```
Db        358 GAGTTCCATCTTTTCTTCATCTTTTAAGGCCCGGTTTTCAATAACCTTCATACCTCTCTC 299

Qy         23 ArgAspLeuThrSerSerSerSerAspGluLeuSerTrpIleIleGluLeuLeuGluLys 42
              :::::|||     |||                  :::||||||:::
Db        298 ACTCTCATCAGCAGCTTTTTCAGC--------------TTCTTCCAGCTTTTGCAGGGC 254

Qy         43 AspGlyMetAla--------------------PheGlnGluAlaLeuAspProGly--- 54
              |||   |||                 |||         |||||||||
Db        253 AGTGGCCAGGCGCTCCTGAGCACGGTCCAGCTCTTCTTCAACCAGCTGGATCCTACGGTT 194

Qy         55 --------------------ProPheAspGlnGlySerProPheAlaGlnGluLeuLeu 67
                                  |||   ||||||:::   :::||||||
Db        193 CAAGGAGGCCACCTCAGCCTCAGCCTGTTCCCGGGCCCGCCTTTCTCCCT-CAACTTCTC 135

Qy         68 AspAspGlyGlnGlnAlaSerProTyrHis--------------------ProGlySer 80
              |||   |||   :::|||   |||                        |||||||||
Db        134 GCTGGAGGCGCTCAGCTCGCTCCTCTGCATCATCTGCCTGCTGCTGCAGAACCTGGATCT 75

Qy         81 CysGlyAla 83
              |||   :::
Db         74 TGCGCTTCA 66
```

```
RESULT 15
US-08-306-691B-23/c
; Sequence 23, Application US/08306691B
; Patent No. 5734039
;  GENERAL INFORMATION:
;    APPLICANT:  Calabretta, Bruno
;    APPLICANT:  Skorski, Tomasz
;    TITLE OF INVENTION:  ANTISENSE
;    TITLE OF INVENTION:  OLIGONUCLEOTIDES TARGETING COOPERATING ONCOGENES
;    NUMBER OF SEQUENCES:  55
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Seidel, Gonda, Lavorgna & Monaco, P.C.
;      STREET:  Two Penn Center, Suite 1800
;      CITY:  Philadelphia
;      STATE:  Pennsylvania
;      COUNTRY:  U.S.A.
;      ZIP:  19102
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Diskette, 3.50 inch, 720 Kb
;      COMPUTER:  IBM PS/2
;      OPERATING SYSTEM:  MS-DOS
;      SOFTWARE:  WordPerfect 5.1
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/306,691B
;      FILING DATE:  September 15, 1994
;      CLASSIFICATION:  514
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:
;      FILING DATE:
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Monaco, Daniel A.
;      REGISTRATION NUMBER:  30,480
;      REFERENCE/DOCKET NUMBER:  8321-8
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (215) 568-8383
;      TELEFAX:  (215) 568-5549
;      TELEX:  No. 5734039e
;  INFORMATION FOR SEQ ID NO:  23:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  2301 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  double
;      TOPOLOGY:  linear
US-08-306-691B-23

Alignment Scores:
Pred. No.:              4.46          Length:          2301
Score:                  72.00         Matches:         31
Percent Similarity:     39.81%        Conservative:    10
Best Local Similarity:  30.10%        Mismatches:      32
Query Match:            16.18%        Indels:          31
```

```
DB:                    1            Gaps:          5

US-08-978-217-7 (1-84) x US-08-306-691B-23 (1-2301)

Qy          6 GluLeuArgLeuValPhe---------GlyProLeuGlyAspGlnLeuHisAlaGlnLeu 22
              |||      |||   |||         ||||||:::   :::   ||||||      |||
Db        553 GAGTTCCATCTTTTCTTCATCTTTTAAGGCCCGGTTTTCAATAACCTTCATACCTCTCTC 494

Qy         23 ArgAspLeuThrSerSerSerSerAspGluLeuSerTrpIleIleGluLeuLeuGluLys 42
              :::::|||     |||                  :::||||||:::
Db        493 ACTCTCATCAGCAGCTTTTTCAGC--------------TTCTTCCAGCTTTTGCAGGGC 449

Qy         43 AspGlyMetAla--------------------PheGlnGluAlaLeuAspProGly--- 54
              |||   |||                 |||         |||||||||
Db        448 AGTGGCCAGGCGCTCCTGAGCACGGTCCAGCTCTTCTTCAACCAGCTGGATCCTACGGTT 389

Qy         55 --------------------ProPheAspGlnGlySerProPheAlaGlnGluLeuLeu 67
                                  |||   ||||||:::   :::||||||
Db        388 CAAGGAGGCCACCTCAGCCTCAGCCTGTTCCCGGGCCCGCCTTTCTCCCT-CAACTTCTC 330

Qy         68 AspAspGlyGlnGlnAlaSerProTyrHis--------------------ProGlySer 80
              |||   |||   :::|||   |||                        |||||||||
Db        329 GCTGGAGGCGCTCAGCTCGCTCCTCTGCATCATCTGCCTGCTGCTGCAGAACCTGGATCT 270

Qy         81 CysGlyAla 83
              |||   :::
Db        269 TGCGCTTCA 261
```

```
Search completed: February 12, 2004, 21:49:58
Job time : 24.1748 secs
```

GenCore version 5.1.6

OM nucleic - nucleic search, using sw model

Run on: February 12, 2004, 21:46:16 ; Search time 14.4951 Seconds
(without alignments)
7673.534 Million cell updates/sec

Title: US-08-978-217-6
Perfect score: 252
Sequence: 1 AATTGTGCCCTTGAGGAGCT.....CCGGCAGCTGTGGCGCAGGA 252

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 569978 seqs, 220691566 residues

Total number of hits satisfying chosen parameters: 1139956

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Issued_Patents_NA:*
1: /cgn2_6/ptodata/1/ina/5A_COMB.seq:*
2: /cgn2_6/ptodata/1/ina/5B_COMB.seq:*
3: /cgn2_6/ptodata/1/ina/6A_COMB.seq:*
4: /cgn2_6/ptodata/1/ina/6B_COMB.seq:*
5: /cgn2_6/ptodata/1/ina/PCTUS_COMB.seq:*
6: /cgn2_6/ptodata/1/ina/backfiles1.seq:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

	Result No.	Score	% Query Match	Length	DB	ID	Description
	1	252	100.0	1907	4	US-09-300-958A-27	Sequence 27, Appl
	2	252	100.0	1907	4	US-09-570-593-4	Sequence 4, Appli
	3	252	100.0	1920	1	US-08-746-789A-1	Sequence 1, Appli
	4	39	15.5	276	4	US-09-313-294A-3437	Sequence 3437, Ap
c	5	38.8	15.4	5173	1	US-08-242-677-1	Sequence 1, Appli
	6	36.2	14.4	741	4	US-09-252-991A-12066	Sequence 12066, A
	7	36.2	14.4	918	4	US-09-252-991A-12009	Sequence 12009, A
c	8	36.2	14.4	1650	4	US-09-252-991A-8097	Sequence 8097, Ap
	9	36.2	14.4	2145	4	US-09-252-991A-8205	Sequence 8205, Ap
	10	35	13.9	1975	2	US-08-852-743-1	Sequence 1, Appli
	11	35	13.9	1975	3	US-09-185-370-1	Sequence 1, Appli
	12	35	13.9	2161	2	US-08-712-709-4	Sequence 4, Appli
	13	35	13.9	2161	3	US-09-111-444-4	Sequence 4, Appli
	14	35	13.9	2161	3	US-09-541-228-4	Sequence 4, Appli
c	15	34.8	13.8	621	4	US-09-252-991A-8781	Sequence 8781, Ap
	16	34.8	13.8	921	4	US-09-252-991A-9092	Sequence 9092, Ap
	17	34.8	13.8	1512	4	US-09-252-991A-9180	Sequence 9180, Ap
c	18	34.8	13.8	1533	4	US-09-252-991A-8895	Sequence 8895, Ap
c	19	34.8	13.8	1758	4	US-09-252-991A-8997	Sequence 8997, Ap
	20	34.6	13.7	6972	4	US-09-595-684B-38	Sequence 38, Appl
	21	34.6	13.7	8309	4	US-09-620-312D-1083	Sequence 1083, Ap
	22	34	13.5	3141	2	US-08-956-242-1	Sequence 1, Appli
	23	34	13.5	3141	3	US-09-351-215-1	Sequence 1, Appli
c	24	33.8	13.4	2128	4	US-09-620-312D-197	Sequence 197, App
	25	33.6	13.3	618	4	US-09-252-991A-7654	Sequence 7654, Ap
c	26	33.6	13.3	744	4	US-09-252-991A-7749	Sequence 7749, Ap
	27	33.6	13.3	798	4	US-09-252-991A-7739	Sequence 7739, Ap
	28	33.2	13.2	921	4	US-09-252-991A-1415	Sequence 1415, Ap
c	29	33.2	13.2	1206	4	US-09-252-991A-16406	Sequence 16406, A
c	30	33.2	13.2	1983	4	US-09-252-991A-16300	Sequence 16300, A
	31	33	13.1	1107	4	US-09-252-991A-3936	Sequence 3936, Ap
	32	33	13.1	1134	4	US-09-252-991A-3908	Sequence 3908, Ap
	33	33	13.1	1217	4	US-09-594-669-11	Sequence 11, Appl
	34	33	13.1	1304	4	US-09-594-669-9	Sequence 9, Appli
c	35	33	13.1	1326	4	US-09-252-991A-4002	Sequence 4002, Ap
	36	33	13.1	1420	4	US-09-594-669-7	Sequence 7, Appli
c	37	32.8	13.0	1317	4	US-09-160-036-2	Sequence 2, Appli
	38	32.8	13.0	1335	4	US-09-252-991A-15421	Sequence 15421, A
c	39	32.8	13.0	1392	4	US-09-160-036-11	Sequence 11, Appl
	40	32.8	13.0	1645	4	US-09-620-312D-807	Sequence 807, App
	41	32.8	13.0	1875	4	US-09-252-991A-5054	Sequence 5054, Ap
	42	32.8	13.0	1962	4	US-09-252-991A-5020	Sequence 5020, Ap
c	43	32.8	13.0	2295	4	US-09-252-991A-5162	Sequence 5162, Ap
	44	32.8	13.0	2352	4	US-09-252-991A-15532	Sequence 15532, A
c	45	32.8	13.0	2916	4	US-09-252-991A-15259	Sequence 15259, A

ALIGNMENTS

RESULT 1
US-09-300-958A-27
; Sequence 27, Application US/09300958A
; Patent No. 6495319
; GENERAL INFORMATION:
; APPLICANT: McClelland, Michael
; APPLICANT: Welsh, John
; APPLICANT: Trenkle, Thomas
; TITLE OF INVENTION: Reduced Complexity Nucleic Acid Targets and Methods of
; TITLE OF INVENTION: Using Same
; FILE REFERENCE: P-PH 3457
; CURRENT APPLICATION NUMBER: US/09/300,958A
; CURRENT FILING DATE: 1999-04-27
; PRIOR APPLICATION NUMBER: 60/083,331
; PRIOR FILING DATE: 1998-04-27
; PRIOR APPLICATION NUMBER: 60/098,070
; PRIOR FILING DATE: 1998-08-27
; PRIOR APPLICATION NUMBER: 60/118,624
; PRIOR FILING DATE: 1999-02-04
; NUMBER OF SEQ ID NOS: 85
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 27
; LENGTH: 1907
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-300-958A-27

Query Match 100.0%; Score 252; DB 4; Length 1907;
Best Local Similarity 100.0%; Pred. No. 5e-59;
Matches 252; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy          1 AATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGCCTCTGGGGGACCAACTCCATGCC 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        405 AATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGCCTCTGGGGGACCAACTCCATGCC 464

Qy         61 CAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATTGAGCTGCTG 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        465 CAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATTGAGCTGCTG 524

Qy        121 GAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCCTTTGACCAGGGCAGC 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        525 GAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCCTTTGACCAGGGCAGC 584

Qy        181 CCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCACCCCGGCAGC 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        585 CCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCACCCCGGCAGC 644

Qy        241 TGTGGCGCAGGA 252
              ||||||||||||
Db        645 TGTGGCGCAGGA 656
```

```
RESULT 2
US-09-570-593-4
; Sequence 4, Application US/09570593
; Patent No. 6566063
; GENERAL INFORMATION:
;  APPLICANT:  Kaufmann, Joerg
;  APPLICANT:  Xin, Hong
;  APPLICANT:  Harrowe, Greg
;  TITLE OF INVENTION:  EXPRESSION OF ETS-DOMAIN PROTEINS IN
;  TITLE OF INVENTION:  CANCER
;  FILE REFERENCE:  2300-1556
;  CURRENT APPLICATION NUMBER: US/09/570,593
;  CURRENT FILING DATE:  2000-05-12
;  PRIOR APPLICATION NUMBER:  60/134,112
;  PRIOR FILING DATE:  1999-05-14
;  NUMBER OF SEQ ID NOS:  13
;  SOFTWARE:  FastSEQ for Windows Version 4.0
; SEQ ID NO 4
;   LENGTH: 1907
;   TYPE: DNA
;   ORGANISM: Homo sapiens
;   FEATURE:
;   NAME/KEY: CDS
;   LOCATION: (96)...(1211)
;   OTHER INFORMATION: Human epithelial-restricted with serine box (ESX)
;   OTHER INFORMATION: protein.
US-09-570-593-4

  Query Match             100.0%;  Score 252;  DB 4;  Length 1907;
  Best Local Similarity   100.0%;  Pred. No. 5e-59;
  Matches  252;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 AATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGCCTCTGGGGGACCAACTCCATGCC 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        405 AATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGCCTCTGGGGGACCAACTCCATGCC 464

Qy         61 CAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATTGAGCTGCTG 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        465 CAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATTGAGCTGCTG 524

Qy        121 GAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCCTTTGACCAGGGCAGC 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        525 GAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCCTTTGACCAGGGCAGC 584

Qy        181 CCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCACCCCGGCAGC 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        585 CCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCACCCCGGCAGC 644

Qy        241 TGTGGCGCAGGA 252
              ||||||||||||
Db        645 TGTGGCGCAGGA 656


RESULT 3
US-08-746-789A-1
; Sequence 1, Application US/08746789A
; Patent No. 5789200
;  GENERAL INFORMATION:
;    APPLICANT:  Ismail Kola, Martin J. Tymms, Christine DeBouck
;    TITLE OF INVENTION:  A No. 5789200el Human ETS Family Member, ELF3
;    NUMBER OF SEQUENCES:  4
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  SmithKline Beecham Corporation
;      STREET:  709 Swedeland Road, P.O. Box 1539
;      CITY:  King of Prussia
;      STATE:  PA
;      COUNTRY:  USA
;      ZIP:  19406-0939
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  DISKETTE, 3.5 INCH, 1.44 Mb STORAGE
;      COMPUTER:  IBM 486
;      OPERATING SYSTEM:  WINDOWS FOR WORKGROUPS
;      SOFTWARE:  MICROSOFT WORD
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/746,789A
;      FILING DATE:  No. 5789200ember 15, 1996
;      CLASSIFICATION:  514
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:
;      FILING DATE:
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  William T. Han
;      REGISTRATION NUMBER:  34,344
;      REFERENCE/DOCKET NUMBER:  ATG 50024
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  610 270 5219
;      TELEFAX:  610 270 4026
;  INFORMATION FOR SEQ ID NO:  1:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  1920
;      TYPE:  Nucleic Acid
;      STRANDEDNESS:  Single
;      TOPOLOGY:  Linear
;    ANTI-SENSE:  No
US-08-746-789A-1

  Query Match             100.0%;  Score 252;  DB 1;  Length 1920;
  Best Local Similarity   100.0%;  Pred. No. 5e-59;
  Matches  252;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 AATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGCCTCTGGGGGACCAACTCCATGCC 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        424 AATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGCCTCTGGGGGACCAACTCCATGCC 483

Qy         61 CAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATTGAGCTGCTG 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        484 CAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATTGAGCTGCTG 543

Qy        121 GAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCCTTTGACCAGGGCAGC 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        544 GAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCCTTTGACCAGGGCAGC 603

Qy        181 CCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCACCCCGGCAGC 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        604 CCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCACCCCGGCAGC 663

Qy        241 TGTGGCGCAGGA 252
              ||||||||||||
Db        664 TGTGGCGCAGGA 675


RESULT 4
US-09-313-294A-3437
; Sequence 3437, Application US/09313294A
; Patent No. 6476212
; GENERAL INFORMATION:
;  APPLICANT:  Lalgudi, Raghunath V.
;  APPLICANT:  Ito, Laura Y.
;  APPLICANT:  Sherman, Bradley K.
;  TITLE OF INVENTION:  POLYNUCLEOTIDES AND POLYPEPTIDES DERIVED FROM CORN EAR
;  FILE REFERENCE:  PL-0017 US
;  CURRENT APPLICATION NUMBER: US/09/313,294A
;  CURRENT FILING DATE:  1999-05-14
;  NUMBER OF SEQ ID NOS:  7600
;  SOFTWARE:  PERL Program
; SEQ ID NO 3437
;   LENGTH: 276
;   TYPE: DNA
;   ORGANISM: Zea mays
;   FEATURE:
;   NAME/KEY: misc_feature
;   OTHER INFORMATION: Incyte ID No. 6476212 700611585H1
US-09-313-294A-3437
```

Query Match 15.5%; Score 39; DB 4; Length 276;
Best Local Similarity 49.3%; Pred. No. 0.07;
Matches 102; Conservative 0; Mismatches 105; Indels 0; Gaps 0;

```
Qy         42 GGGGGACCAACTCCATGCCCAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAG 101
              || ||| | ||| |  ||  ||       |||| |   ||||  |   |         ||
Db         60 GGTGGAGCCACTGCTGGCGGAGTCCTCCGACCGCTTCTCCATGTTCCCGATCCGCTTCCC 119

Qy        102 TTGGATCATTGAGCTGCTGGAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGG 161
                ||||   ||| |     ||||||  |   | |||||  |  ||||    ||     |
Db        120 GCAGATCTGGGAGTTCTACAAGAAGGCGGTGGCGTCCTTCTGGACGGCCGAGGAGGTTGA 179

Qy        162 GCCCTTTGACCAGGGCAGCCCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAG 221
              | || || | | | | | || | | ||| ||||     |||||  |  ||   ||
Db        180 CCTCTCTGCCGACGCCCGGCACTGGGACGAGGCGCTGTCCCCCGACGAGCGCCACTTCAT 239

Qy        222 CCCCTACCACCCCGGCAGCTGTGGCGC 248
              | |  ||   | ||| |  ||  | |||
Db        240 CTCTCACGTGCTCGCCTTCTTCGCCGC 266
```

RESULT 5
US-08-242-677-1/c
; Sequence 1, Application US/08242677
; Patent No. 5677143
; GENERAL INFORMATION:
; APPLICANT: Gaynor, Richard B
; APPLICANT: Wu, Foon W.
; TITLE OF INVENTION: Cellular Nucleic Acid Binding Protein
; TITLE OF INVENTION: and Uses Thereof in regulating Gene Expression and in the
; TITLE OF INVENTION: Treatment of AIDS
; NUMBER OF SEQUENCES: 9
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Arnold, White & Durkee
; STREET: P.O. Box 4433
; CITY: Houston
; STATE: TX
; COUNTRY: USA
; ZIP: 77210
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/242,677
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Mayfield, Denise L.
; REGISTRATION NUMBER: 33,732
; REFERENCE/DOCKET NUMBER: UTSD:401
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 713-787-1400
; TELEFAX: 713-789-2679
; INFORMATION FOR SEQ ID NO: 1:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 5173 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: cDNA
; FEATURE:
; NAME/KEY: CDS
; LOCATION: 1..4863
US-08-242-677-1

Query Match 15.4%; Score 38.8; DB 1; Length 5173;
Best Local Similarity 50.5%; Pred. No. 0.16;
Matches 94; Conservative 0; Mismatches 92; Indels 0; Gaps 0;

```
Qy         48 CCAACTCCATGCCCAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGAT 107
              ||| |||     ||  || || || | | | | | | | ||| | ||| |       |
```

```
Db        193 CCACCTCGCGCGCCGCCTCCGGGAGCGCGCCTGCGCCCCCGCTGCCGCGCGCCTCCTCGT 134

Qy        108 CATTGAGCTGCTGGAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCCTT 167
              | | |||| |||| ||||||| |      |     |||| | |  ||  |      |||||
Db        133 CCTCGAGCCGCTGCAGAAGGAAGCGCAGCGTCTCCACGCGCTCCGCGGATGCCTCCCCTT 74

Qy        168 TGACCAGGGCAGCCCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCTA 227
              |  ||| ||  |       | || || | | ||     |  ||||  |  || | |
Db         73 GGCACAGCGCCCCAAGCAGGGCCCGGGGGTCCCGGCTCTGCGAGAGCAGCGCTTCCGCGA 14

Qy        228 CCACCC 233
              |||||
Db         13 GCACCC 8
```

RESULT 6
US-09-252-991A-12066
; Sequence 12066, Application US/09252991A
; Patent No. 6551795
; GENERAL INFORMATION:
; APPLICANT: Marc J. Rubenfield et al.
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
; TITLE OF INVENTION: AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
; FILE REFERENCE: 107196.136
; CURRENT APPLICATION NUMBER: US/09/252,991A
; CURRENT FILING DATE: 1999-02-18
; PRIOR APPLICATION NUMBER: US 60/074,788
; PRIOR FILING DATE: 1998-02-18
; PRIOR APPLICATION NUMBER: US 60/094,190
; PRIOR FILING DATE: 1998-07-27
; NUMBER OF SEQ ID NOS: 33142
; SEQ ID NO 12066
; LENGTH: 741
; TYPE: DNA
; ORGANISM: Pseudomonas aeruginosa
US-09-252-991A-12066

Query Match 14.4%; Score 36.2; DB 4; Length 741;
Best Local Similarity 47.6%; Pred. No. 0.51;
Matches 107; Conservative 0; Mismatches 118; Indels 0; Gaps 0;

```
Qy         16 GAGCTGCGTCTGGTCTTTGGGCCTCTGGGGGACCAACTCCATGCCCAGCTGCGAGACCTC 75
              ||||    || | |   |||| | | |    |||| |    |  ||||   ||||
Db         29 GAGCGCTTCCTCGCCGCCGGGCAGCGGCCGCTGGAACTGGACCTGCGCCTGCTGTACCTG 88

Qy         76 ACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATTGAGCTGCTGGAGAAGGATGGCATG 135
              |   |||| ||     | |   | |    ||| | || ||||| ||  |||    |  |
Db         89 AACACCAGTTCGATCAAGGCCATGATGGACATCCTCGACCTGCTCGAAGAGGCCCACCAG 148

Qy        136 GCCTTCCAGGAGGCCCTAGACCCAGGGCCCTTTGACCAGGGCAGCCCCTTTGCCCAGGAG 195
              | |   |    || |       |   ||| ||  |||| | |||  |     | |  |||
Db        149 GGCGGTCGCCCGGTCAGCCTGCGCTGGCACTACGACCGGCGCAACGAACGGGTCGCCGAG 208

Qy        196 CTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCACCCCGGCAGC 240
              |||   || ||    |  | | | ||  || || |  || || |
Db        209 CTGGCCGAGGAGTTCCGCGAGGACTGCAGCTTCCCCTTCGCCATC 253
```

RESULT 7
US-09-252-991A-12009
; Sequence 12009, Application US/09252991A
; Patent No. 6551795
; GENERAL INFORMATION:
; APPLICANT: Marc J. Rubenfield et al.
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
; TITLE OF INVENTION: AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
; FILE REFERENCE: 107196.136
; CURRENT APPLICATION NUMBER: US/09/252,991A
; CURRENT FILING DATE: 1999-02-18
; PRIOR APPLICATION NUMBER: US 60/074,788
; PRIOR FILING DATE: 1998-02-18
; PRIOR APPLICATION NUMBER: US 60/094,190
; PRIOR FILING DATE: 1998-07-27

```
;  NUMBER OF SEQ ID NOS:  33142
; SEQ ID NO 12009
;   LENGTH: 918
;   TYPE: DNA
;   ORGANISM: Pseudomonas aeruginosa
US-09-252-991A-12009

  Query Match             14.4%;  Score 36.2;  DB 4;  Length 918;
  Best Local Similarity   47.6%;  Pred. No. 0.53;
  Matches  107;  Conservative    0;  Mismatches  118;  Indels    0;  Gaps    0;

Qy          16 GAGCTGCGTCTGGTCTTTGGGCCTCTGGGGGACCAACTCCATGCCCAGCTGCGAGACCTC 75
               ||||      || | |   |||| | | |     |||| |     |  ||||   ||||
Db         676 GAGCGCTTCCTCGCCGCCGGGCAGCGGCCGCTGGAACTGGACCTGCGCCTGCTGTACCTG 735

Qy          76 ACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATTGAGCTGCTGGAGAAGGATGGCATG 135
               |  |||| ||    | | | | |     ||| | || ||||| ||  |||     | |
Db         736 AACACCAGTTCGATCAAGGCCATGATGGACATCCTCGACCTGCTCGAAGAGGCCCACCAG 795

Qy         136 GCCTTCCAGGAGGCCCTAGACCCAGGGCCCTTTGACCAGGGCAGCCCCTTTGCCCAGGAG 195
               | |   |   || |     |   ||| ||  |||| | ||| |       | |   |||
Db         796 GGCGGTCGCCCGGTCAGCCTGCGCTGGCACTACGACCGGCGCAACGAACGGGTCGCCGAG 855

Qy         196 CTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCACCCCGGCAGC 240
               |||   || ||     |  | | | ||  || || |  || || |
Db         856 CTGGCCGAGGAGTTCCGCGAGGACTGCAGCTTCCCCTTCGCCATC 900


RESULT 8
US-09-252-991A-8097/c
; Sequence 8097, Application US/09252991A
; Patent No. 6551795
; GENERAL INFORMATION:
;  APPLICANT:  Marc J. Rubenfield et al.
;  TITLE OF INVENTION:  NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
;  TITLE OF INVENTION:  AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
;  FILE REFERENCE:  107196.136
;  CURRENT APPLICATION NUMBER: US/09/252,991A
;  CURRENT FILING DATE:  1999-02-18
;  PRIOR APPLICATION NUMBER:  US 60/074,788
;  PRIOR FILING DATE:  1998-02-18
;  PRIOR APPLICATION NUMBER:  US 60/094,190
;  PRIOR FILING DATE:  1998-07-27
;  NUMBER OF SEQ ID NOS:  33142
; SEQ ID NO 8097
;   LENGTH: 1650
;   TYPE: DNA
;   ORGANISM: Pseudomonas aeruginosa
US-09-252-991A-8097

  Query Match             14.4%;  Score 36.2;  DB 4;  Length 1650;
  Best Local Similarity   47.9%;  Pred. No. 0.62;
  Matches  104;  Conservative    0;  Mismatches  113;  Indels    0;  Gaps    0;

Qy           7 GCCCTTGAGGAGCTGCGTCTGGTCTTTGGGCCTCTGGGGGACCAACTCCATGCCCAGCTG 66
               | || ||   |  | ||||| |  |    ||||  | |  | |   | ||| |||| | ||
Db         657 GGCCATGTAGGCCGGCGTCAGCGCCGACGGCCAGTCGTTGGCGTGCACCAGGCCCGGTTG 598

Qy          67 CGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATTGAGCTGCTGGAGAAG 126
               | || |||     ||   ||  | |  || ||| |  |    |  |  | |  ||    |
Db         597 CCAGCCCTGGGCGCCGCGTCCACCGGCGATCTCGGCGGCGGCCAGGCACAGGCGGGCGAA 538

Qy         127 GATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCCTTTGACCAGGGCAGCCCCTTT 186
               |       |||   ||| |   | | | | ||  |      |  ||  | | | | |||
Db         537 GCGCAGGTGGTTGTCCGGCCAGTCGTTGCCCTGGTCGTCCATGTACGGCGTACCCTCGCG 478

Qy         187 GCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCC 223
                 |  |||| || ||  ||    ||||| | |  ||
Db         477 CTCGTAGAGCAGCGGGCAGAGCACCAGCATGACTTCC 441


RESULT 9
US-09-252-991A-8205
; Sequence 8205, Application US/09252991A
; Patent No. 6551795
; GENERAL INFORMATION:
;  APPLICANT:  Marc J. Rubenfield et al.
;  TITLE OF INVENTION:  NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
;  TITLE OF INVENTION:  AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
;  FILE REFERENCE:  107196.136
;  CURRENT APPLICATION NUMBER: US/09/252,991A
;  CURRENT FILING DATE:  1999-02-18
;  PRIOR APPLICATION NUMBER:  US 60/074,788
;  PRIOR FILING DATE:  1998-02-18
;  PRIOR APPLICATION NUMBER:  US 60/094,190
;  PRIOR FILING DATE:  1998-07-27
;  NUMBER OF SEQ ID NOS:  33142
; SEQ ID NO 8205
;   LENGTH: 2145
;   TYPE: DNA
;   ORGANISM: Pseudomonas aeruginosa
US-09-252-991A-8205

  Query Match             14.4%;  Score 36.2;  DB 4;  Length 2145;
  Best Local Similarity   47.9%;  Pred. No. 0.66;
  Matches  104;  Conservative    0;  Mismatches  113;  Indels    0;  Gaps    0;

Qy           7 GCCCTTGAGGAGCTGCGTCTGGTCTTTGGGCCTCTGGGGGACCAACTCCATGCCCAGCTG 66
               | || ||   |  | ||||| |  |    ||||  | |  | |   | ||| |||| | ||
Db        1516 GGCCATGTAGGCCGGCGTCAGCGCCGACGGCCAGTCGTTGGCGTGCACCAGGCCCGGTTG 1575

Qy          67 CGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATTGAGCTGCTGGAGAAG 126
               | || |||     ||   ||  | |  || ||| |  |    |  |  | |  ||    |
Db        1576 CCAGCCCTGGGCGCCGCGTCCACCGGCGATCTCGGCGGCGGCCAGGCACAGGCGGGCGAA 1635

Qy         127 GATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCCTTTGACCAGGGCAGCCCCTTT 186
               |       |||   ||| |   | | | | ||  |      |  ||  | | | | |||
Db        1636 GCGCAGGTGGTTGTCCGGCCAGTCGTTGCCCTGGTCGTCCATGTACGGCGTACCCTCGCG 1695

Qy         187 GCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCC 223
                 |  |||| || ||  ||    ||||| | |  ||
Db        1696 CTCGTAGAGCAGCGGGCAGAGCACCAGCATGACTTCC 1732


RESULT 10
US-08-852-743-1
; Sequence 1, Application US/08852743
; Patent No. 5830699
;  GENERAL INFORMATION:
;    APPLICANT:  Force, Thomas
;    APPLICANT:  Kyriakis, John M.
;    APPLICANT:  Pombo, Celia M.
;    APPLICANT:  Bonventre, Joseph
;    TITLE OF INVENTION:  SOK-1 AND METHODS OF USE
;    NUMBER OF SEQUENCES:  10
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Fish & Richardson, P.C.
;      STREET:  225 Franklin Street
;      CITY:  Boston
;      STATE:  MA
;      COUNTRY:  US
;      ZIP:  02110-2804
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Diskette
;      COMPUTER:  IBM Compatible
;      OPERATING SYSTEM:  Windows95
;      SOFTWARE:  FastSEQ for Windows Version 2.0
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/852,743
;      FILING DATE:  7-MAY-1997
;      CLASSIFICATION:  435
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  60/016,774
;      FILING DATE:  7-MAY-1996
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Fraser, Janis K.
```

```
;       REGISTRATION NUMBER:  34,819
;       REFERENCE/DOCKET NUMBER:  00786/327001
;     TELECOMMUNICATION INFORMATION:
;       TELEPHONE:  617/542-5070
;       TELEFAX:  617/542-8906
;       TELEX:  200154
;   INFORMATION FOR SEQ ID NO:  1:
;     SEQUENCE CHARACTERISTICS:
;       LENGTH:  1975 base pairs
;       TYPE:  nucleic acid
;       STRANDEDNESS:  single
;       TOPOLOGY:  linear
;     MOLECULE TYPE:  cDNA
;     FEATURE:
;       NAME/KEY:  Coding Sequence
;       LOCATION:  127...1404
US-08-852-743-1

  Query Match             13.9%;  Score 35;  DB 2;  Length 1975;
  Best Local Similarity   48.3%;  Pred. No. 1.4;
  Matches   98;  Conservative    0;  Mismatches  105;  Indels    0;  Gaps    0;

Qy          46 GACCAACTCCATGCCCAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGG 105
               ||  | |||    || ||||       | |         |||| | ||  ||| ||     |
Db         175 GAGGAGCTCTTCACCAAGCTCGACCGCATTGGCAAGGGCTCGTTTGGGGAGGTCTACAAG 234

Qy         106 ATCATTGAGCTGCTGGAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCC 165
               |||  ||     |      |||||  |  ||||| || ||      |          | | ||
Db         235 GGCATCGATAACCACACAAAGGAGGTGGTGGCCATCAAGATCATCGACCTGGAGGAGGCC 294

Qy         166 TTTGACCAGGGCAGCCCCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCC 225
               ||  ||  |      | |    ||||||  |     |  |  | |||||    | |||||||
Db         295 GAGGATGAGATCGAGGACATCCAGCAGGAGATCACTGTCCTCAGTCAGTGCGACAGCCCC 354

Qy         226 TACCACCCCGGCAGCTGTGGCGC 248
               |||  | ||  ||  || |||| |
Db         355 TACATCACCCGCTACTTTGGCTC 377


RESULT 11
US-09-185-370-1
; Sequence 1, Application US/09185370
; Patent No. 6093560
;  GENERAL INFORMATION:
;    APPLICANT:  Force, Thomas
;    APPLICANT:  Kyriakis, John M.
;    APPLICANT:  Pombo, Celia M.
;    APPLICANT:  Bonventre, Joseph
;    TITLE OF INVENTION:  SOK-1 AND METHODS OF USE
;    NUMBER OF SEQUENCES:  10
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Fish & Richardson, P.C.
;      STREET:  225 Franklin Street
;      CITY:  Boston
;      STATE:  MA
;      COUNTRY:  US
;      ZIP:  02110-2804
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Diskette
;      COMPUTER:  IBM Compatible
;      OPERATING SYSTEM:  Windows95
;      SOFTWARE:  FastSEQ for Windows Version 2.0
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/185,370
;      FILING DATE:
;      CLASSIFICATION:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/852,743
;      FILING DATE:
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Fraser, Janis K.
;      REGISTRATION NUMBER:  34,819
;      REFERENCE/DOCKET NUMBER:  00786/327001
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  617/542-5070
;      TELEFAX:  617/542-8906
;      TELEX:  200154
;  INFORMATION FOR SEQ ID NO:  1:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  1975 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  cDNA
;    FEATURE:
;      NAME/KEY:  Coding Sequence
;      LOCATION:  127...1404
US-09-185-370-1

  Query Match             13.9%;  Score 35;  DB 3;  Length 1975;
  Best Local Similarity   48.3%;  Pred. No. 1.4;
  Matches   98;  Conservative    0;  Mismatches  105;  Indels    0;  Gaps    0;

Qy          46 GACCAACTCCATGCCCAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGG 105
               ||  | |||    || ||||       | |         |||| | ||  ||| ||     |
Db         175 GAGGAGCTCTTCACCAAGCTCGACCGCATTGGCAAGGGCTCGTTTGGGGAGGTCTACAAG 234

Qy         106 ATCATTGAGCTGCTGGAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCC 165
               |||  ||     |      |||||  |  ||||| || ||      |          | | ||
Db         235 GGCATCGATAACCACACAAAGGAGGTGGTGGCCATCAAGATCATCGACCTGGAGGAGGCC 294

Qy         166 TTTGACCAGGGCAGCCCCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCC 225
               ||  ||  |      | |    ||||||  |     |  |  | |||||    | |||||||
Db         295 GAGGATGAGATCGAGGACATCCAGCAGGAGATCACTGTCCTCAGTCAGTGCGACAGCCCC 354

Qy         226 TACCACCCCGGCAGCTGTGGCGC 248
               |||  | ||  ||  || |||| |
Db         355 TACATCACCCGCTACTTTGGCTC 377


RESULT 12
US-08-712-709-4
; Sequence 4, Application US/08712709
; Patent No. 5863780
;  GENERAL INFORMATION:
;    APPLICANT:  Au-Young, Janice
;    APPLICANT:  Guegler, Karl J.
;    APPLICANT:  Hawkins, Phillip R.
;    TITLE OF INVENTION:  NOVEL HUMAN PROTEIN KINASES
;    NUMBER OF SEQUENCES:  9
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Incyte Pharmaceuticals, Inc.
;      STREET:  3174 Porter Drive
;      CITY:  Palo Alto
;      STATE:  CA
;      COUNTRY:  U.S.
;      ZIP:  94304
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Diskette
;      COMPUTER:  IBM Compatible
;      OPERATING SYSTEM:  DOS
;      SOFTWARE:  FastSEQ Version 1.5
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/712,709
;      FILING DATE:  Filed Herewith
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Billings, Lucy J
;      REGISTRATION NUMBER:  36,749
;      REFERENCE/DOCKET NUMBER:  PF-0118 US
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  415-855-0555
;      TELEFAX:  415-845-4166
;  INFORMATION FOR SEQ ID NO:  4:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  2161 base pairs
;      TYPE:  nucleic acid
```

```
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  cDNA
;    IMMEDIATE SOURCE:
;      LIBRARY:
;      CLONE:  Consensus
US-08-712-709-4

  Query Match             13.9%;  Score 35;  DB 2;  Length 2161;
  Best Local Similarity   48.3%;  Pred. No. 1.4;
  Matches   98;  Conservative    0;  Mismatches  105;  Indels    0;  Gaps    0;

Qy          46 GACCAACTCCATGCCCAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGG 105
               ||  | |||    || ||||      | |         |||| | ||  ||| ||     |
Db         286 GAGGAGCTCTTCACCAAGCTCGACCGCATTGGCAAGGGCTCGTTTGGGGAGGTCTACAAG 345

Qy         106 ATCATTGAGCTGCTGGAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCC 165
               ||| ||    |      |||||  |   ||||| || ||      |          | | ||
Db         346 GGCATCGATAACCACACAAAGGAGGTGGTGGCCATCAAGATCATCGACCTGGAGGAGGCC 405

Qy         166 TTTGACCAGGGCAGCCCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCC 225
               ||  ||  |      | |    ||||||  |    | |  | |||||   | |||||||
Db         406 GAGGATGAGATCGAGGACATCCAGCAGGAGATCACTGTCCTCAGTCAGTGCGACAGCCCC 465

Qy         226 TACCACCCCGGCAGCTGTGGCGC 248
               |||  | || ||  || |||| |
Db         466 TACATCACCCGCTACTTTGGCTC 488


RESULT 13
US-09-111-444-4
; Sequence 4, Application US/09111444
; Patent No. 6045792
;  GENERAL INFORMATION:
;    APPLICANT:  Au-Young, Janice
;    APPLICANT:  Guegler, Karl J.
;    APPLICANT:  Hawkins, Phillip R.
;    TITLE OF INVENTION:  NOVEL HUMAN PROTEIN KINASES
;    NUMBER OF SEQUENCES:  9
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Incyte Pharmaceuticals, Inc.
;      STREET:  3174 Porter Drive
;      CITY:  Palo Alto
;      STATE:  CA
;      COUNTRY:  U.S.
;      ZIP:  94304
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Diskette
;      COMPUTER:  IBM Compatible
;      OPERATING SYSTEM:  DOS
;      SOFTWARE:  FastSEQ Version 1.5
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/111,444
;      FILING DATE:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/712,709
;      FILING DATE:
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Billings, Lucy J
;      REGISTRATION NUMBER:  36,749
;      REFERENCE/DOCKET NUMBER:  PF-0118 US
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  415-855-0555
;      TELEFAX:  415-845-4166
;  INFORMATION FOR SEQ ID NO:  4:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  2161 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  cDNA
;    IMMEDIATE SOURCE:
;      LIBRARY:
;      CLONE:  Consensus
US-09-111-444-4

  Query Match             13.9%;  Score 35;  DB 3;  Length 2161;
  Best Local Similarity   48.3%;  Pred. No. 1.4;
  Matches   98;  Conservative    0;  Mismatches  105;  Indels    0;  Gaps    0;

Qy          46 GACCAACTCCATGCCCAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGG 105
               ||  | |||    || ||||      | |         |||| | ||  ||| ||     |
Db         286 GAGGAGCTCTTCACCAAGCTCGACCGCATTGGCAAGGGCTCGTTTGGGGAGGTCTACAAG 345

Qy         106 ATCATTGAGCTGCTGGAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCC 165
               ||| ||    |      |||||  |   ||||| || ||      |          | | ||
Db         346 GGCATCGATAACCACACAAAGGAGGTGGTGGCCATCAAGATCATCGACCTGGAGGAGGCC 405

Qy         166 TTTGACCAGGGCAGCCCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCC 225
               ||  ||  |      | |    ||||||  |    | |  | |||||   | |||||||
Db         406 GAGGATGAGATCGAGGACATCCAGCAGGAGATCACTGTCCTCAGTCAGTGCGACAGCCCC 465

Qy         226 TACCACCCCGGCAGCTGTGGCGC 248
               |||  | || ||  || |||| |
Db         466 TACATCACCCGCTACTTTGGCTC 488


RESULT 14
US-09-541-228-4
; Sequence 4, Application US/09541228
; Patent No. 6232077
;  GENERAL INFORMATION:
;    APPLICANT:  Au-Young, Janice
;    APPLICANT:  Guegler, Karl J.
;    APPLICANT:  Hawkins, Phillip R.
;    TITLE OF INVENTION:  NOVEL HUMAN PROTEIN KINASES
;    NUMBER OF SEQUENCES:  9
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Incyte Pharmaceuticals, Inc.
;      STREET:  3174 Porter Drive
;      CITY:  Palo Alto
;      STATE:  CA
;      COUNTRY:  U.S.
;      ZIP:  94304
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Diskette
;      COMPUTER:  IBM Compatible
;      OPERATING SYSTEM:  DOS
;      SOFTWARE:  FastSEQ Version 1.5
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/541,228
;      FILING DATE:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/712,709
;      FILING DATE:
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Billings, Lucy J
;      REGISTRATION NUMBER:  36,749
;      REFERENCE/DOCKET NUMBER:  PF-0118 US
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  415-855-0555
;      TELEFAX:  415-845-4166
;  INFORMATION FOR SEQ ID NO:  4:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  2161 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  cDNA
;    IMMEDIATE SOURCE:
;      LIBRARY:
;      CLONE:  Consensus
US-09-541-228-4

  Query Match             13.9%;  Score 35;  DB 3;  Length 2161;
  Best Local Similarity   48.3%;  Pred. No. 1.4;
```

```
  Matches   98;  Conservative    0;  Mismatches  105;  Indels    0;  Gaps    0;

Qy          46 GACCAACTCCATGCCCAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGG 105
               ||  | |||    || ||||      | |         ||||  | ||  ||| ||     |
Db         286 GAGGAGCTCTTCACCAAGCTCGACCGCATTGGCAAGGGCTCGTTTGGGGAGGTCTACAAG 345

Qy         106 ATCATTGAGCTGCTGGAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCC 165
               ||| ||     |     ||||| |   ||||| || ||      |          | | ||
Db         346 GGCATCGATAACCACACAAAGGAGGTGGTGGCCATCAAGATCATCGACCTGGAGGAGGCC 405

Qy         166 TTTGACCAGGGCAGCCCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCC 225
               ||  ||  |      | |    |||||| |     | |  | |||||   | |||||||
Db         406 GAGGATGAGATCGAGGACATCCAGCAGGAGATCACTGTCCTCAGTCAGTGCGACAGCCCC 465

Qy         226 TACCACCCCGGCAGCTGTGGCGC 248
               |||  | || ||  || |||| |
Db         466 TACATCACCCGCTACTTTGGCTC 488


RESULT 15
US-09-252-991A-8781/c
; Sequence 8781, Application US/09252991A
; Patent No. 6551795
; GENERAL INFORMATION:
;  APPLICANT:  Marc J. Rubenfield et al.
;  TITLE OF INVENTION:  NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
;  TITLE OF INVENTION:  AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
;  FILE REFERENCE:  107196.136
;  CURRENT APPLICATION NUMBER: US/09/252,991A
;  CURRENT FILING DATE:  1999-02-18
;  PRIOR APPLICATION NUMBER:  US 60/074,788
;  PRIOR FILING DATE:  1998-02-18
;  PRIOR APPLICATION NUMBER:  US 60/094,190
;  PRIOR FILING DATE:  1998-07-27
;  NUMBER OF SEQ ID NOS:  33142
; SEQ ID NO 8781
;   LENGTH: 621
;   TYPE: DNA
;   ORGANISM: Pseudomonas aeruginosa
US-09-252-991A-8781

  Query Match             13.8%;  Score 34.8;  DB 4;  Length 621;
  Best Local Similarity   54.8%;  Pred. No. 1.2;
  Matches   69;  Conservative    0;  Mismatches   57;  Indels    0;  Gaps    0;

Qy         105 GATCATTGAGCTGCTGGAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCC 164
               ||  |  ||| | | | |   |||  | |   | | ||||||  |  || || |||| ||
Db         576 GACCGCTGACCCGGTCGGCGAGGCGGCCGACGGCCTCCAGGTCGTGCTCGATCCAGAGCA 517

Qy         165 CTTTGACCAGGGCAGCCCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCC 224
               |  ||||   |||     |    | |||| ||| || |  ||| |  | | | |||  ||
Db         516 CGGTGACGCCGGCCTGGCGCCAGTCCAGCAGCAGCCGCTCGAAGACCTGGATGCCGCCCT 457

Qy         225 CTACCA 230
               |  | |
Db         456 CGTCGA 451


Search completed: February 13, 2004, 01:54:41
Job time : 15.4951 secs
```

GenCore version 5.1.6

OM protein - nucleic search, using frame_plus_p2n model

Run on: February 12, 2004, 19:34:21 ; Search time 93.522 Seconds
(without alignments)
1750.959 Million cell updates/sec

Title: US-08-978-217-2
Perfect score: 1980
Sequence: 1 MAATCEISNIFSNYFSAMYS.....YKFGKNSSGWKEEEVLQSRN 371

Scoring table: BLOSUM62
Xgapop 10.0 , Xgapext 0.5
Ygapop 10.0 , Ygapext 0.5
Fgapop 6.0 , Fgapext 7.0
Delop 6.0 , Delext 7.0

Searched: 569978 seqs, 220691566 residues

Total number of hits satisfying chosen parameters: 1139956

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Command line parameters:
-MODEL=frame+_p2n.model -DEV=xlh
-Q=/cgn2_1/USPTO_spool/US08978217/runat_10022004_133826_20481/app_query.fasta_1.1500
-DB=Issued_Patents_NA -QFMT=fastap -SUFFIX=rni -MINMATCH=0.1 -LOOPCL=0
-LOOPEXT=0 -UNITS=bits -START=1 -END=-1 -MATRIX=blosum62 -TRANS=human40.cdi
-LIST=45 -DOCALIGN=200 -THR_SCORE=pct -THR_MAX=100 -THR_MIN=0 -ALIGN=15
-MODE=LOCAL -OUTFMT=pto -NORM=ext -HEAPSIZE=500 -MINLEN=0 -MAXLEN=2000000000
-USER=US08978217_@CGN_1_1_115_@runat_10022004_133826_20481 -NCPU=6 -ICPU=3
-NO_MMAP -LARGEQUERY -NEG_SCORES=0 -WAIT -DSPBLOCK=100 -LONGLOG
-DEV_TIMEOUT=120 -WARN_TIMEOUT=30 -THREADS=1 -XGAPOP=10 -XGAPEXT=0.5 -FGAPOP=6
-FGAPEXT=7 -YGAPOP=10 -YGAPEXT=0.5 -DELOP=6 -DELEXT=7

Database : Issued_Patents_NA:*
1: /cgn2_6/ptodata/1/ina/5A_COMB.seq:*
2: /cgn2_6/ptodata/1/ina/5B_COMB.seq:*
3: /cgn2_6/ptodata/1/ina/6A_COMB.seq:*
4: /cgn2_6/ptodata/1/ina/6B_COMB.seq:*
5: /cgn2_6/ptodata/1/ina/PCTUS_COMB.seq:*
6: /cgn2_6/ptodata/1/ina/backfiles1.seq:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	1980	100.0	1907	4	US-09-300-958A-27	Sequence 27, Appl
2	1980	100.0	1907	4	US-09-570-593-4	Sequence 4, Appli
3	1980	100.0	1920	1	US-08-746-789A-1	Sequence 1, Appli
4	903	45.6	502	4	US-09-389-681-282	Sequence 282, App
5	903	45.6	502	4	US-09-620-405B-282	Sequence 282, App
6	903	45.6	502	4	US-09-339-338-282	Sequence 282, App
7	903	45.6	502	4	US-09-433-826B-282	Sequence 282, App
8	903	45.6	502	4	US-09-604-287A-282	Sequence 282, App
9	559	28.2	5427	3	US-09-009-913-2	Sequence 2, Appli
10	555.5	28.1	5510	3	US-09-009-913-3	Sequence 3, Appli
11	555.5	28.1	5667	3	US-09-009-913-4	Sequence 4, Appli
c 12	519.5	26.2	852	3	US-09-020-956-44	Sequence 44, Appl
c 13	519.5	26.2	852	3	US-09-030-607-44	Sequence 44, Appl
c 14	519.5	26.2	852	4	US-09-439-313-44	Sequence 44, Appl
c 15	519.5	26.2	852	4	US-09-352-616A-44	Sequence 44, Appl
c 16	519.5	26.2	852	4	US-09-232-149A-44	Sequence 44, Appl
17	486.5	24.6	848	3	US-09-009-913-338	Sequence 338, App
18	422	21.3	2280	3	US-09-009-913-8	Sequence 8, Appli
19	422	21.3	2428	3	US-09-009-913-6	Sequence 6, Appli
20	422	21.3	2498	3	US-09-009-913-10	Sequence 10, Appl
21	281	14.2	237	4	US-09-016-434-927	Sequence 927, App
22	246.5	12.4	2975	1	US-08-368-281-1	Sequence 1, Appli
23	242	12.2	3240	1	US-08-368-281-3	Sequence 3, Appli
24	238.5	12.0	1894	4	US-09-570-593-1	Sequence 1, Appli
25	238.5	12.0	1905	3	US-09-055-113-2	Sequence 2, Appli
26	238.5	12.0	3317	4	US-09-570-593-12	Sequence 12, Appl
27	234.5	11.8	1752	3	US-09-360-779-1	Sequence 1, Appli
28	234.5	11.8	1752	4	US-09-435-335-1	Sequence 1, Appli
29	233	11.8	2268	3	US-09-344-579-1	Sequence 1, Appli
30	228	11.5	1604	1	US-08-306-691B-43	Sequence 43, Appl
31	228	11.5	1604	5	PCT-US93-06251-9	Sequence 9, Appli
32	214.5	10.8	1933	4	US-09-920-759-3	Sequence 3, Appli
33	214.5	10.8	1976	4	US-09-920-759-10	Sequence 10, Appl
34	213.5	10.8	1528	3	US-08-878-177-3	Sequence 3, Appli
35	212	10.7	2938	2	US-08-343-443B-3	Sequence 3, Appli
36	207	10.5	1447	3	US-08-878-177-1	Sequence 1, Appli
37	203.5	10.3	2266	2	US-09-213-767-1	Sequence 1, Appli
38	197	9.9	665	4	US-09-920-759-11	Sequence 11, Appl
39	190	9.6	2410	2	US-08-780-835B-1	Sequence 1, Appli
40	190	9.6	2410	3	US-09-303-268-1	Sequence 1, Appli
41	190	9.6	2410	3	US-09-116-049-1	Sequence 1, Appli
42	190	9.6	2410	4	US-09-884-363-1	Sequence 1, Appli
43	189	9.5	2667	2	US-08-469-412A-1	Sequence 1, Appli
44	189	9.5	2667	3	US-09-021-715-1	Sequence 1, Appli
45	185.5	9.4	2064	3	US-08-875-944B-1	Sequence 1, Appli

ALIGNMENTS

RESULT 1
US-09-300-958A-27
; Sequence 27, Application US/09300958A
; Patent No. 6495319
; GENERAL INFORMATION:
; APPLICANT: McClelland, Michael
; APPLICANT: Welsh, John
; APPLICANT: Trenkle, Thomas
; TITLE OF INVENTION: Reduced Complexity Nucleic Acid Targets and Methods of
; TITLE OF INVENTION: Using Same
; FILE REFERENCE: P-PH 3457
; CURRENT APPLICATION NUMBER: US/09/300,958A
; CURRENT FILING DATE: 1999-04-27
; PRIOR APPLICATION NUMBER: 60/083,331
; PRIOR FILING DATE: 1998-04-27
; PRIOR APPLICATION NUMBER: 60/098,070
; PRIOR FILING DATE: 1998-08-27
; PRIOR APPLICATION NUMBER: 60/118,624
; PRIOR FILING DATE: 1999-02-04
; NUMBER OF SEQ ID NOS: 85
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 27
; LENGTH: 1907
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-300-958A-27

Alignment Scores:

Pred. No.:	1.68e-185	Length:	1907
Score:	1980.00	Matches:	371
Percent Similarity:	100.00%	Conservative:	0
Best Local Similarity:	100.00%	Mismatches:	0
Query Match:	100.00%	Indels:	0
DB:	4	Gaps:	0

US-08-978-217-2 (1-371) x US-09-300-958A-27 (1-1907)

```
Qy          1 MetAlaAlaThrCysGluIleSerAsnIlePheSerAsnTyrPheSerAlaMetTyrSer 20
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         96 ATGGCTGCAACCTGTGAGATTAGCAACATTTTTAGCAACTACTTCAGTGCGATGTACAGC 155

Qy         21 SerGluAspSerThrLeuAlaSerValProProAlaAlaThrPheGlyAlaAspAspLeu 40
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        156 TCGGAGGACTCCACCCTGGCCTCTGTTCCCCCTGCTGCCACCTTTGGGGCCGATGACTTG 215

Qy         41 ValLeuThrLeuSerAsnProGlnMetSerLeuGluGlyThrGluLysAlaSerTrpLeu 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        216 GTACTGACCCTGAGCAACCCCCAGATGTCATTGGAGGGTACAGAGAAGGCCAGCTGGTTG 275

Qy         61 GlyGluGlnProGlnPheTrpSerLysThrGlnValLeuAspTrpIleSerTyrGlnVal 80
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        276 GGGGAACAGCCCCAGTTCTGGTCGAAGACGCAGGTTCTGGACTGGATCAGCTACCAAGTG 335

Qy         81 GluLysAsnLysTyrAspAlaSerAlaIleAspPheSerArgCysAspMetAspGlyAla 100
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        336 GAGAAGAACAAGTACGACGCAAGCGCCATTGACTTCTCACGATGTGACATGGATGGCGCC 395

Qy        101 ThrLeuCysAsnCysAlaLeuGluGluLeuArgLeuValPheGlyProLeuGlyAspGln 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        396 ACCCTCTGCAATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGCCTCTGGGGGACCAA 455

Qy        121 LeuHisAlaGlnLeuArgAspLeuThrSerSerSerSerAspGluLeuSerTrpIleIle 140
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        456 CTCCATGCCCAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATT 515

Qy        141 GluLeuLeuGluLysAspGlyMetAlaPheGlnGluAlaLeuAspProGlyProPheAsp 160
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        516 GAGCTGCTGGAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCCTTTGAC 575

Qy        161 GlnGlySerProPheAlaGlnGluLeuLeuAspAspGlyGlnGlnAlaSerProTyrHis 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        576 CAGGGCAGCCCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCAC 635

Qy        181 ProGlySerCysGlyAlaGlyAlaProSerProGlySerSerAspValSerThrAlaGly 200
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        636 CCCGGCAGCTGTGGCGCAGGAGCCCCCTCCCCTGGCAGCTCTGACGTCTCCACCGCAGGG 695

Qy        201 ThrGlyAlaSerArgSerSerHisSerSerAspSerGlyGlySerAspValAspLeuAsp 220
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        696 ACTGGTGCTTCTCGGAGCTCCCACTCCTCAGACTCCGGTGGAAGTGACGTGGACCTGGAT 755

Qy        221 ProThrAspGlyLysLeuProSerAspGlyPheArgAspCysLysLysGlyAspPro 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        756 CCCACTGATGGCAAGCTCTTCCCCAGCGATGGTTTTCGTGACTGCAAGAAGGGGGATCCC 815

Qy        241 LysHisGlyLysArgLysArgGlyArgProArgLysLeuSerLysGluTyrTrpAspCys 260
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        816 AAGCACGGGAAGCGGAAACGAGGCCGGCCCCGAAAGCTGAGCAAAGAGTACTGGGACTGT 875

Qy        261 LeuGluGlyLysLysSerLysHisAlaProArgGlyThrHisLeuTrpGluPheIleArg 280
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        876 CTCGAGGGCAAGAAGAGCAAGCACGCGCCCAGAGGCACCCACCTGTGGGAGTTCATCCGG 935

Qy        281 AspIleLeuIleHisProGluLeuAsnGluGlyLeuMetLysTrpGluAsnArgHisGlu 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        936 GACATCCTCATCCACCCGGAGCTCAACGAGGGCCTCATGAAGTGGGAGAATCGGCATGAA 995

Qy        301 GlyValPheLysPheLeuArgSerGluAlaValAlaGlnLeuTrpGlyGlnLysLysLys 320
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        996 GGCGTCTTCAAGTTCCTGCGCTCCGAGGCTGTGGCCCAACTATGGGGCCAAAAGAAAAAG 1055

Qy        321 AsnSerAsnMetThrTyrGluLysLeuSerArgAlaMetArgTyrTyrTyrLysArgGlu 340
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1056 AACAGCAACATGACCTACGAGAAGCTGAGCCGGGCCATGAGGTACTACTACAAACGGGAG 1115

Qy        341 IleLeuGluArgValAspGlyArgArgLeuValTyrLysPheGlyLysAsnSerSerGly 360
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1116 ATCCTGGAACGGGTGGATGGCCGGCGACTCGTCTACAAGTTTGGCAAAAACTCAAGCGGC 1175

Qy        361 TrpLysGluGluGluValLeuGlnSerArgAsn 371
              |||||||||||||||||||||||||||||||||
Db       1176 TGGAAGGAGGAAGAGGTTCTCCAGAGTCGGAAC 1208
```

RESULT 2
US-09-570-593-4
; Sequence 4, Application US/09570593
; Patent No. 6566063
; GENERAL INFORMATION:
; APPLICANT: Kaufmann, Joerg
; APPLICANT: Xin, Hong
; APPLICANT: Harrowe, Greg
; TITLE OF INVENTION: EXPRESSION OF ETS-DOMAIN PROTEINS IN
; TITLE OF INVENTION: CANCER
; FILE REFERENCE: 2300-1556
; CURRENT APPLICATION NUMBER: US/09/570,593
; CURRENT FILING DATE: 2000-05-12
; PRIOR APPLICATION NUMBER: 60/134,112
; PRIOR FILING DATE: 1999-05-14
; NUMBER OF SEQ ID NOS: 13
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 4
; LENGTH: 1907
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (96)...(1211)
; OTHER INFORMATION: Human epithelial-restricted with serine box (ESX)
; OTHER INFORMATION: protein.
US-09-570-593-4

Alignment Scores:

Pred. No.:	1.68e-185	Length:	1907
Score:	1980.00	Matches:	371
Percent Similarity:	100.00%	Conservative:	0
Best Local Similarity:	100.00%	Mismatches:	0
Query Match:	100.00%	Indels:	0
DB:	4	Gaps:	0

US-08-978-217-2 (1-371) x US-09-570-593-4 (1-1907)

```
Qy          1 MetAlaAlaThrCysGluIleSerAsnIlePheSerAsnTyrPheSerAlaMetTyrSer 20
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         96 ATGGCTGCAACCTGTGAGATTAGCAACATTTTTAGCAACTACTTCAGTGCGATGTACAGC 155

Qy         21 SerGluAspSerThrLeuAlaSerValProProAlaAlaThrPheGlyAlaAspAspLeu 40
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        156 TCGGAGGACTCCACCCTGGCCTCTGTTCCCCCTGCTGCCACCTTTGGGGCCGATGACTTG 215

Qy         41 ValLeuThrLeuSerAsnProGlnMetSerLeuGluGlyThrGluLysAlaSerTrpLeu 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        216 GTACTGACCCTGAGCAACCCCCAGATGTCATTGGAGGGTACAGAGAAGGCCAGCTGGTTG 275

Qy         61 GlyGluGlnProGlnPheTrpSerLysThrGlnValLeuAspTrpIleSerTyrGlnVal 80
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        276 GGGGAACAGCCCCAGTTCTGGTCGAAGACGCAGGTTCTGGACTGGATCAGCTACCAAGTG 335

Qy         81 GluLysAsnLysTyrAspAlaSerAlaIleAspPheSerArgCysAspMetAspGlyAla 100
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        336 GAGAAGAACAAGTACGACGCAAGCGCCATTGACTTCTCACGATGTGACATGGATGGCGCC 395

Qy        101 ThrLeuCysAsnCysAlaLeuGluGluLeuArgLeuValPheGlyProLeuGlyAspGln 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        396 ACCCTCTGCAATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGCCTCTGGGGGACCAA 455

Qy        121 LeuHisAlaGlnLeuArgAspLeuThrSerSerSerSerAspGluLeuSerTrpIleIle 140
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        456 CTCCATGCCCAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATT 515

Qy        141 GluLeuLeuGluLysAspGlyMetAlaPheGlnGluAlaLeuAspProGlyProPheAsp 160
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        516 GAGCTGCTGGAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCCTTTGAC 575
```

```
Qy        161 GlnGlySerProPheAlaGlnGluLeuLeuAspAspGlyGlnGlnAlaSerProTyrHis 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        576 CAGGGCAGCCCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCAC 635

Qy        181 ProGlySerCysGlyAlaGlyAlaProSerProGlySerSerAspValSerThrAlaGly 200
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        636 CCCGGCAGCTGTGGCGCAGGAGCCCCCTCCCCTGGCAGCTCTGACGTCTCCACCGCAGGG 695

Qy        201 ThrGlyAlaSerArgSerSerHisSerSerAspSerGlyGlySerAspValAspLeuAsp 220
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        696 ACTGGTGCTTCTCGGAGCTCCCACTCCTCAGACTCCGGTGGAAGTGACGTGGACCTGGAT 755

Qy        221 ProThrAspGlyLysLeuProSerAspGlyPheArgAspCysLysLysGlyAspPro 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        756 CCCACTGATGGCAAGCTCTTCCCCAGCGATGGTTTTCGTGACTGCAAGAAGGGGGATCCC 815

Qy        241 LysHisGlyLysArgLysArgGlyArgProArgLysLeuSerLysGluTyrTrpAspCys 260
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        816 AAGCACGGGAAGCGGAAACGAGGCCGGCCCCGAAAGCTGAGCAAAGAGTACTGGGACTGT 875

Qy        261 LeuGluGlyLysLysSerLysHisAlaProArgGlyThrHisLeuTrpGluPheIleArg 280
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        876 CTCGAGGGCAAGAAGAGCAAGCACGCGCCCAGAGGCACCCACCTGTGGGAGTTCATCCGG 935

Qy        281 AspIleLeuIleHisProGluLeuAsnGluGlyLeuMetLysTrpGluAsnArgHisGlu 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        936 GACATCCTCATCCACCCGGAGCTCAACGAGGGCCTCATGAAGTGGGAGAATCGGCATGAA 995

Qy        301 GlyValPheLysPheLeuArgSerGluAlaValAlaGlnLeuTrpGlyGlnLysLysLys 320
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        996 GGCGTCTTCAAGTTCCTGCGCTCCGAGGCTGTGGCCCAACTATGGGGCCAAAAGAAAAAG 1055

Qy        321 AsnSerAsnMetThrTyrGluLysLeuSerArgAlaMetArgTyrTyrTyrLysArgGlu 340
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1056 AACAGCAACATGACCTACGAGAAGCTGAGCCGGGCCATGAGGTACTACTACAAACGGGAG 1115

Qy        341 IleLeuGluArgValAspGlyArgArgLeuValTyrLysPheGlyLysAsnSerSerGly 360
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1116 ATCCTGGAACGGGTGGATGGCCGGCGACTCGTCTACAAGTTTGGCAAAAACTCAAGCGGC 1175

Qy        361 TrpLysGluGluGluValLeuGlnSerArgAsn 371
              |||||||||||||||||||||||||||||||||
Db       1176 TGGAAGGAGGAAGAGGTTCTCCAGAGTCGGAAC 1208

RESULT 3
US-08-746-789A-1
; Sequence 1, Application US/08746789A
; Patent No. 5789200
;  GENERAL INFORMATION:
;    APPLICANT:  Ismail Kola, Martin J. Tymms, Christine DeBouck
;    TITLE OF INVENTION:  A No. 5789200el Human ETS Family Member, ELF3
;    NUMBER OF SEQUENCES:  4
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  SmithKline Beecham Corporation
;      STREET:  709 Swedeland Road, P.O. Box 1539
;      CITY:  King of Prussia
;      STATE:  PA
;      COUNTRY:  USA
;      ZIP:  19406-0939
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  DISKETTE, 3.5 INCH, 1.44 Mb STORAGE
;      COMPUTER:  IBM 486
;      OPERATING SYSTEM:  WINDOWS FOR WORKGROUPS
;      SOFTWARE:  MICROSOFT WORD
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/746,789A
;      FILING DATE:  No. 5789200ember 15, 1996
;      CLASSIFICATION:  514
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:
;      FILING DATE:
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  William T. Han
;      REGISTRATION NUMBER:  34,344
;      REFERENCE/DOCKET NUMBER:  ATG 50024
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  610 270 5219
;      TELEFAX:  610 270 4026
;  INFORMATION FOR SEQ ID NO:  1:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  1920
;      TYPE:  Nucleic Acid
;      STRANDEDNESS:  Single
;      TOPOLOGY:  Linear
;    ANTI-SENSE:  No
US-08-746-789A-1

Alignment Scores:
Pred. No.:                1.69e-185      Length:          1920
Score:                    1980.00        Matches:         371
Percent Similarity:       100.00%        Conservative:    0
Best Local Similarity:    100.00%        Mismatches:      0
Query Match:              100.00%        Indels:          0
DB:                       1              Gaps:            0

US-08-978-217-2 (1-371) x US-08-746-789A-1 (1-1920)

Qy          1 MetAlaAlaThrCysGluIleSerAsnIlePheSerAsnTyrPheSerAlaMetTyrSer 20
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        115 ATGGCTGCAACCTGTGAGATTAGCAACATTTTTAGCAACTACTTCAGTGCGATGTACAGC 174

Qy         21 SerGluAspSerThrLeuAlaSerValProProAlaAlaThrPheGlyAlaAspAspLeu 40
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        175 TCGGAGGACTCCACCTTGGCCTCTGTTCCCCCTGCTGCCACCTTTGGGGCCGATGACTTG 234

Qy         41 ValLeuThrLeuSerAsnProGlnMetSerLeuGluGlyThrGluLysAlaSerTrpLeu 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        235 GTACTGACCCTGAGCAACCCCCAGATGTCATTGGAGGGTACAGAGAAGGCTAGCTGGTTG 294

Qy         61 GlyGluGlnProGlnPheTrpSerLysThrGlnValLeuAspTrpIleSerTyrGlnVal 80
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        295 GGGGAACAGCCCCAGTTCTGGTCGAAGACGCAGGTTCTGGACTGGATCAGCTACCAAGTG 354

Qy         81 GluLysAsnLysTyrAspAlaSerAlaIleAspPheSerArgCysAspMetAspGlyAla 100
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        355 GAGAAGAACAAGTACGACGCAAGCGCCATTGACTTCTCACGATGTGACATGGATGGGGCC 414

Qy        101 ThrLeuCysAsnCysAlaLeuGluGluLeuArgLeuValPheGlyProLeuGlyAspGln 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        415 ACCCTCTGCAATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGCCTCTGGGGGACCAA 474

Qy        121 LeuHisAlaGlnLeuArgAspLeuThrSerSerSerSerAspGluLeuSerTrpIleIle 140
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        475 CTCCATGCCCAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATT 534

Qy        141 GluLeuLeuGluLysAspGlyMetAlaPheGlnGluAlaLeuAspProGlyProPheAsp 160
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        535 GAGCTGCTGGAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCCTTTGAC 594

Qy        161 GlnGlySerProPheAlaGlnGluLeuLeuAspAspGlyGlnGlnAlaSerProTyrHis 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        595 CAGGGCAGCCCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCAC 654

Qy        181 ProGlySerCysGlyAlaGlyAlaProSerProGlySerSerAspValSerThrAlaGly 200
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        655 CCCGGCAGCTGTGGCGCAGGAGCCCCCTCCCCTGGCAGCTCTGACGTCTCCACCGCAGGG 714

Qy        201 ThrGlyAlaSerArgSerSerHisSerSerAspSerGlyGlySerAspValAspLeuAsp 220
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        715 ACTGGTGCTTCTCGGAGCTCCCACTCCTCAGACTCCGGTGGAAGTGACGTGGACCTGGAT 774

Qy        221 ProThrAspGlyLysLeuProSerAspGlyPheArgAspCysLysLysGlyAspPro 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        775 CCCACTGATGGCAAGCTCTTCCCCAGCGATGGTTTTCGTGACTGCAAGAAGGGGGATCCC 834
```

```
Qy        241 LysHisGlyLysArgLysArgGlyArgProArgLysLeuSerLysGluTyrTrpAspCys 260
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        835 AAGCACGGGAAGCGGAAACGAGGCCGGCCCCGAAAGCTGAGCAAAGAGTACTGGGACTGT 894

Qy        261 LeuGluGlyLysLysSerLysHisAlaProArgGlyThrHisLeuTrpGluPheIleArg 280
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        895 CTCGAGGGCAAGAAGAGCAAGCACGCGCCCAGAGGCACCCACCTGTGGGAGTTCATCCGG 954

Qy        281 AspIleLeuIleHisProGluLeuAsnGluGlyLeuMetLysTrpGluAsnArgHisGlu 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        955 GACATCCTCATCCACCCGGAGCTCAACGAGGGCCTCATGAAGTGGGAGAATCGGCATGAA 1014

Qy        301 GlyValPheLysPheLeuArgSerGluAlaValAlaGlnLeuTrpGlyGlnLysLysLys 320
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1015 GGCGTCTTCAAGTTCCTGCGCTCCGAGGCTGTGGCCCAACTATGGGGGCAAAAGAAAAAG 1074

Qy        321 AsnSerAsnMetThrTyrGluLysLeuSerArgAlaMetArgTyrTyrTyrLysArgGlu 340
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1075 AACAGCAACATGACCTACGAGAAGCTGAGCCGGGCCATGAGGTACTACTACAAACGGGAG 1134

Qy        341 IleLeuGluArgValAspGlyArgArgLeuValTyrLysPheGlyLysAsnSerSerGly 360
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1135 ATCCTGGAACGGGTGGATGGCCGGCGACTCGTCTACAAGTTTGGCAAAAACTCAAGCGGC 1194

Qy        361 TrpLysGluGluGluValLeuGlnSerArgAsn 371
              |||||||||||||||||||||||||||||||||
Db       1195 TGGAAGGAGGAAGAGGTTCTCCAGAGTCGGAAC 1227

RESULT 4
US-09-389-681-282
; Sequence 282, Application US/09389681A
; Patent No. 6518237
; GENERAL INFORMATION:
;  APPLICANT: Yuqui, Jiang
;  APPLICANT: Dillon, Davin C.
;  APPLICANT: Mitcham, Jennifer L.
;  APPLICANT: Xu, Jiangchun
;  TITLE OF INVENTION: COMPOSITIONS FOR THE TREATMENT AND
;  TITLE OF INVENTION: DIAGNOSIS OF BREAST CANCER AND METHODS FOR THEIR USE
;  FILE REFERENCE: 210121.470C3
;  CURRENT APPLICATION NUMBER: US/09/389,681A
;  CURRENT FILING DATE: 1999-09-02
;  NUMBER OF SEQ ID NOS: 463
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 282
;   LENGTH: 502
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-389-681-282

Alignment Scores:
Pred. No.:              3.01e-80      Length:          502
Score:                  903.00        Matches:         166
Percent Similarity:     100.00%       Conservative:    0
Best Local Similarity:  100.00%       Mismatches:      0
Query Match:            45.61%        Indels:          0
DB:                     4             Gaps:            0

US-08-978-217-2 (1-371) x US-09-389-681-282 (1-502)

Qy        184 CysGlyAlaGlyAlaProSerProGlySerSerAspValSerThrAlaGlyThrGlyAla 203
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          3 TGTGGCGCAGGAGCCCCCTCCCCCGGCAGCTCTGACGTCTCCACCGCAGGGACTGGTGCT 62

Qy        204 SerArgSerSerHisSerSerAspSerGlyGlySerAspValAspLeuAspProThrAsp 223
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         63 TCTCGGAGCTCCCACTCCTCAGACTCCGGTGGAAGTGACGTGGACCTGGATCCCACTGAT 122

Qy        224 GlyLysLeuPheProSerAspGlyPheArgAspCysLysLysGlyAspProLysHisGly 243
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        123 GGCAAGCTCTTCCCCAGCGATGGTTTTCGTGACTGCAAGAAGGGGGATCCCAAGCACGGG 182

Qy        244 LysArgLysArgGlyArgProArgLysLeuSerLysGluTyrTrpAspCysLeuGluGly 263
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        183 AAGCGGAAACGAGGCCGGCCCCGAAAGCTGAGCAAAGAGTACTGGGACTGTCTCGAGGGC 242

Qy        264 LysLysSerLysHisAlaProArgGlyThrHisLeuTrpGluPheIleArgAspIleLeu 283
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        243 AAGAAGAGCAAGCACGCGCCCAGAGGCACCCACCTGTGGGAGTTCATCCGGGACATCCTC 302

Qy        284 IleHisProGluLeuAsnGluGlyLeuMetLysTrpGluAsnArgHisGluGlyValPhe 303
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        303 ATCCACCCGGAGCTCAACGAGGGCCTCATGAAGTGGGAGAATCGGCATGAAGGCGTCTTC 362

Qy        304 LysPheLeuArgSerGluAlaValAlaGlnLeuTrpGlyGlnLysLysLysAsnSerAsn 323
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        363 AAGTTCCTGCGCTCCGAGGCTGTGGCCCAACTATGGGGCCAAAAGAAAAAGAACAGCAAC 422

Qy        324 MetThrTyrGluLysLeuSerArgAlaMetArgTyrTyrTyrLysArgGluIleLeuGlu 343
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        423 ATGACCTACGAGAAGCTGAGCCGGGCCATGAGGTACTACTACAAACGGGAGATCCTGGAA 482

Qy        344 ArgValAspGlyArgArg 349
              |||||||||||||||||
Db        483 CGGGTGGATGGCCGGCGA 500

RESULT 5
US-09-620-405B-282
; Sequence 282, Application US/09620405B
; Patent No. 6528054
; GENERAL INFORMATION:
;  APPLICANT: Jiang, Yuqiu
;  APPLICANT:  Dillon, Davin C.
;  APPLICANT:  Mitcham, Jennifer L.
;  APPLICANT:  Xu, Jiangchun
;  APPLICANT:  Harlocker, Susan L.
;  APPLICANT:  Hepler, William T.
;  TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY AND
;  TITLE OF INVENTION:  DIAGNOSIS OF BREAST CANCER
;  FILE REFERENCE: 210121.470C8
;  CURRENT APPLICATION NUMBER: US/09/620,405B
;  CURRENT FILING DATE:  2000-07-20
;  NUMBER OF SEQ ID NOS: 495
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 282
;   LENGTH: 502
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-620-405B-282

Alignment Scores:
Pred. No.:              3.01e-80      Length:          502
Score:                  903.00        Matches:         166
Percent Similarity:     100.00%       Conservative:    0
Best Local Similarity:  100.00%       Mismatches:      0
Query Match:            45.61%        Indels:          0
DB:                     4             Gaps:            0

US-08-978-217-2 (1-371) x US-09-620-405B-282 (1-502)

Qy        184 CysGlyAlaGlyAlaProSerProGlySerSerAspValSerThrAlaGlyThrGlyAla 203
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          3 TGTGGCGCAGGAGCCCCCTCCCCCGGCAGCTCTGACGTCTCCACCGCAGGGACTGGTGCT 62

Qy        204 SerArgSerSerHisSerSerAspSerGlyGlySerAspValAspLeuAspProThrAsp 223
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         63 TCTCGGAGCTCCCACTCCTCAGACTCCGGTGGAAGTGACGTGGACCTGGATCCCACTGAT 122

Qy        224 GlyLysLeuPheProSerAspGlyPheArgAspCysLysLysGlyAspProLysHisGly 243
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        123 GGCAAGCTCTTCCCCAGCGATGGTTTTCGTGACTGCAAGAAGGGGGATCCCAAGCACGGG 182

Qy        244 LysArgLysArgGlyArgProArgLysLeuSerLysGluTyrTrpAspCysLeuGluGly 263
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        183 AAGCGGAAACGAGGCCGGCCCCGAAAGCTGAGCAAAGAGTACTGGGACTGTCTCGAGGGC 242
```

```
Qy        264 LysLysSerLysHisAlaProArgGlyThrHisLeuTrpGluPheIleArgAspIleLeu 283
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        243 AAGAAGAGCAAGCACGCGCCCAGAGGCACCCACCTGTGGGAGTTCATCCGGGACATCCTC 302

Qy        284 IleHisProGluLeuAsnGluGlyLeuMetLysTrpGluAsnArgHisGluGlyValPhe 303
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        303 ATCCACCCGGAGCTCAACGAGGGCCTCATGAAGTGGGAGAATCGGCATGAAGGCGTCTTC 362

Qy        304 LysPheLeuArgSerGluAlaValAlaGlnLeuTrpGlyGlnLysLysLysAsnSerAsn 323
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        363 AAGTTCCTGCGCTCCGAGGCTGTGGCCCAACTATGGGGCCAAAAGAAAAAGAACAGCAAC 422

Qy        324 MetThrTyrGluLysLeuSerArgAlaMetArgTyrTyrTyrLysArgGluIleLeuGlu 343
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        423 ATGACCTACGAGAAGCTGAGCCGGGCCATGAGGTACTACTACAAACGGGAGATCCTGGAA 482

Qy        344 ArgValAspGlyArgArg 349
              ||||||||||||||||||
Db        483 CGGGTGGATGGCCGGCGA 500
```

RESULT 6
US-09-339-338-282
; Sequence 282, Application US/09339338A
; Patent No. 6573368
; GENERAL INFORMATION:
; APPLICANT: Yuqiu, Jiang
; APPLICANT: Dillon, Davin C.
; APPLICANT: Mitcham, Jennifer L.
; APPLICANT: Xu, Jiangchun
; TITLE OF INVENTION: COMPOSITIONS FOR THE TREATMENT AND
; TITLE OF INVENTION: DIAGNOSIS OF BREAST CANCER AND METHODS FOR THEIR USE
; FILE REFERENCE: 210121.470C2
; CURRENT APPLICATION NUMBER: US/09/339,338A
; CURRENT FILING DATE: 1999-06-23
; NUMBER OF SEQ ID NOS: 315
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 282
; LENGTH: 502
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-339-338-282

Alignment Scores:

Pred. No.:	3.01e-80	Length:	502
Score:	903.00	Matches:	166
Percent Similarity:	100.00%	Conservative:	0
Best Local Similarity:	100.00%	Mismatches:	0
Query Match:	45.61%	Indels:	0
DB:	4	Gaps:	0

US-08-978-217-2 (1-371) x US-09-339-338-282 (1-502)

```
Qy        184 CysGlyAlaGlyAlaProSerProGlySerSerAspValSerThrAlaGlyThrGlyAla 203
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          3 TGTGGCGCAGGAGCCCCCTCCCCCGGCAGCTCTGACGTCTCCACCGCAGGGACTGGTGCT 62

Qy        204 SerArgSerSerHisSerSerAspSerGlyGlySerAspValAspLeuAspProThrAsp 223
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         63 TCTCGGAGCTCCCACTCCTCAGACTCCGGTGGAAGTGACGTGGACCTGGATCCCACTGAT 122

Qy        224 GlyLysLeuPheProSerAspGlyPheArgAspCysLysLysGlyAspProLysHisGly 243
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        123 GGCAAGCTCTTCCCCAGCGATGGTTTTCGTGACTGCAAGAAGGGGGATCCCAAGCACGGG 182

Qy        244 LysArgLysArgGlyArgProArgLysLeuSerLysGluTyrTrpAspCysLeuGluGly 263
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        183 AAGCGGAAACGAGGCCGGCCCCGAAAGCTGAGCAAAGAGTACTGGGACTGTCTCGAGGGC 242

Qy        264 LysLysSerLysHisAlaProArgGlyThrHisLeuTrpGluPheIleArgAspIleLeu 283
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        243 AAGAAGAGCAAGCACGCGCCCAGAGGCACCCACCTGTGGGAGTTCATCCGGGACATCCTC 302

Qy        284 IleHisProGluLeuAsnGluGlyLeuMetLysTrpGluAsnArgHisGluGlyValPhe 303
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        303 ATCCACCCGGAGCTCAACGAGGGCCTCATGAAGTGGGAGAATCGGCATGAAGGCGTCTTC 362

Qy        304 LysPheLeuArgSerGluAlaValAlaGlnLeuTrpGlyGlnLysLysLysAsnSerAsn 323
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        363 AAGTTCCTGCGCTCCGAGGCTGTGGCCCAACTATGGGGCCAAAAGAAAAAGAACAGCAAC 422

Qy        324 MetThrTyrGluLysLeuSerArgAlaMetArgTyrTyrTyrLysArgGluIleLeuGlu 343
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        423 ATGACCTACGAGAAGCTGAGCCGGGCCATGAGGTACTACTACAAACGGGAGATCCTGGAA 482

Qy        344 ArgValAspGlyArgArg 349
              ||||||||||||||||||
Db        483 CGGGTGGATGGCCGGCGA 500
```

RESULT 7
US-09-433-826B-282
; Sequence 282, Application US/09433826B
; Patent No. 6579973
; GENERAL INFORMATION:
; APPLICANT: Jiang, Yuqui
; APPLICANT: Dillon, Davin C.
; APPLICANT: Mitcham, Jennifer L.
; APPLICANT: Xu, Jiangchun
; APPLICANT: Harlocker, Susan L.
; TITLE OF INVENTION: COMPOSITIONS FOR THE TREATMENT AND
; TITLE OF INVENTION: DIAGNOSIS OF BREAST CANCER AND METHODS FOR THEIR USE
; FILE REFERENCE: 210121.470C4
; CURRENT APPLICATION NUMBER: US/09/433,826B
; CURRENT FILING DATE: 1999-11-03
; NUMBER OF SEQ ID NOS: 474
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 282
; LENGTH: 502
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-433-826B-282

Alignment Scores:

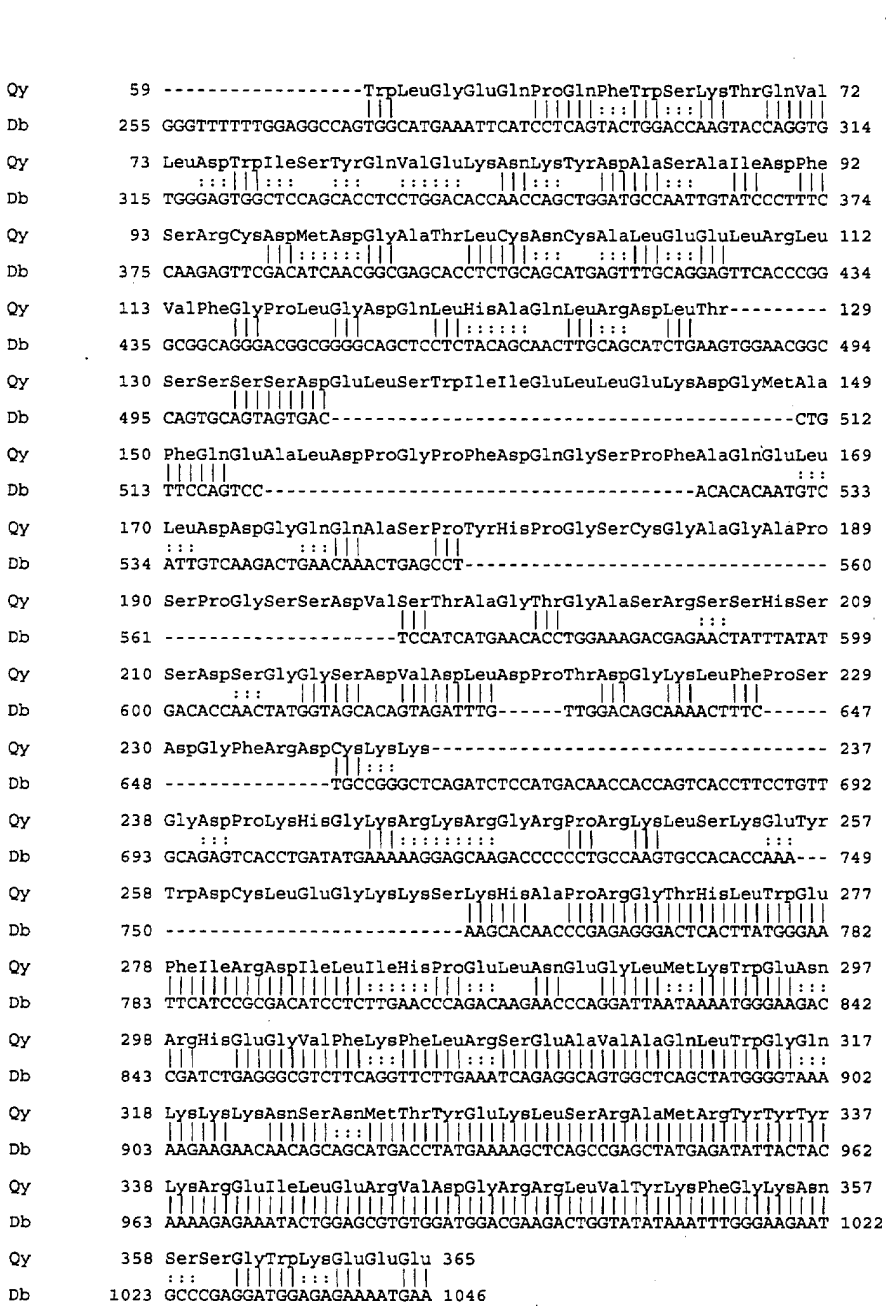
Pred. No.:	3.01e-80	Length:	502
Score:	903.00	Matches:	166
Percent Similarity:	100.00%	Conservative:	0
Best Local Similarity:	100.00%	Mismatches:	0
Query Match:	45.61%	Indels:	0
DB:	4	Gaps:	0

US-08-978-217-2 (1-371) x US-09-433-826B-282 (1-502)

```
Qy        184 CysGlyAlaGlyAlaProSerProGlySerSerAspValSerThrAlaGlyThrGlyAla 203
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          3 TGTGGCGCAGGAGCCCCCTCCCCCGGCAGCTCTGACGTCTCCACCGCAGGGACTGGTGCT 62

Qy        204 SerArgSerSerHisSerSerAspSerGlyGlySerAspValAspLeuAspProThrAsp 223
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         63 TCTCGGAGCTCCCACTCCTCAGACTCCGGTGGAAGTGACGTGGACCTGGATCCCACTGAT 122

Qy        224 GlyLysLeuPheProSerAspGlyPheArgAspCysLysLysGlyAspProLysHisGly 243
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        123 GGCAAGCTCTTCCCCAGCGATGGTTTTCGTGACTGCAAGAAGGGGGATCCCAAGCACGGG 182

Qy        244 LysArgLysArgGlyArgProArgLysLeuSerLysGluTyrTrpAspCysLeuGluGly 263
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        183 AAGCGGAAACGAGGCCGGCCCCGAAAGCTGAGCAAAGAGTACTGGGACTGTCTCGAGGGC 242

Qy        264 LysLysSerLysHisAlaProArgGlyThrHisLeuTrpGluPheIleArgAspIleLeu 283
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        243 AAGAAGAGCAAGCACGCGCCCAGAGGCACCCACCTGTGGGAGTTCATCCGGGACATCCTC 302

Qy        284 IleHisProGluLeuAsnGluGlyLeuMetLysTrpGluAsnArgHisGluGlyValPhe 303
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        303 ATCCACCCGGAGCTCAACGAGGGCCTCATGAAGTGGGAGAATCGGCATGAAGGCGTCTTC 362

Qy        304 LysPheLeuArgSerGluAlaValAlaGlnLeuTrpGlyGlnLysLysLysAsnSerAsn 323
```

```
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         363 AAGTTCCTGCGCTCCGAGGCTGTGGCCCAACTATGGGGCCAAAAGAAAAAGAACAGCAAC 422

Qy         324 MetThrTyrGluLysLeuSerArgAlaMetArgTyrTyrTyrLysArgGluIleLeuGlu 343
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         423 ATGACCTACGAGAAGCTGAGCCGGGCCATGAGGTACTACTACAAACGGAGATCCTGGAA 482

Qy         344 ArgValAspGlyArgArg 349
               ||||||||||||||||||
Db         483 CGGGTGGATGGCCGGCGA 500

RESULT 8
US-09-604-287A-282
; Sequence 282, Application US/09604287A
; Patent No. 6586572
; GENERAL INFORMATION:
;  APPLICANT: Jiang, Yuqiu
;  APPLICANT:  Dillon, Davin C.
;  APPLICANT:  Mitcham, Jennifer L.
;  APPLICANT:  Xu, Jiangchun
;  APPLICANT:  Harlocker, Susan L.
;  APPLICANT:  Hepler, William T.
;  TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY AND
;  TITLE OF INVENTION:  DIAGNOSIS OF BREAST CANCER
;  FILE REFERENCE: 210121.470C7
;  CURRENT APPLICATION NUMBER: US/09/604,287A
;  CURRENT FILING DATE:  2000-06-22
;  NUMBER OF SEQ ID NOS: 489
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 282
;   LENGTH: 502
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-604-287A-282

Alignment Scores:
Pred. No.:                3.01e-80       Length:        502
Score:                    903.00         Matches:       166
Percent Similarity:       100.00%        Conservative:  0
Best Local Similarity:    100.00%        Mismatches:    0
Query Match:              45.61%         Indels:        0
DB:                       4              Gaps:          0

US-08-978-217-2 (1-371) x US-09-604-287A-282 (1-502)

Qy         184 CysGlyAlaGlyAlaProSerProGlySerSerAspValSerThrAlaGlyThrGlyAla 203
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db           3 TGTGGCGCAGGAGCCCCCTCCCCCGGCAGCTCTGACGTCTCCACCGCAGGGACTGGTGCT 62

Qy         204 SerArgSerSerHisSerSerAspSerGlyGlySerAspValAspLeuAspProThrAsp 223
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          63 TCTCGGAGCTCCCACTCCTCAGACTCCGGTGGAAGTGACGTGGACCTGGATCCCACTGAT 122

Qy         224 GlyLysLeuPheProSerAspGlyPheArgAspCysLysLysGlyAspProLysHisGly 243
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         123 GGCAAGCTCTTCCCCAGCGATGGTTTTCGTGACTGCAAGAAGGGGGATCCCAAGCACGGG 182

Qy         244 LysArgLysArgGlyArgProArgLysLeuSerLysGluTyrTrpAspCysLeuGluGly 263
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         183 AAGCGGAAACGAGGCCGGCCCCGAAAGCTGAGCAAAGAGTACTGGGACTGTCTCGAGGGC 242

Qy         264 LysLysSerLysHisAlaProArgGlyThrHisLeuTrpGluPheIleArgAspIleLeu 283
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         243 AAGAAGAGCAAGCACGCGCCCAGAGGCACCCACCTGTGGGAGTTCATCCGGGACATCCTC 302

Qy         284 IleHisProGluLeuAsnGluGlyLeuMetLysTrpGluAsnArgHisGluGlyValPhe 303
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         303 ATCCACCCGGAGCTCAACGAGGGCCTCATGAAGTGGGAGAATCGGCATGAAGGCGTCTTC 362

Qy         304 LysPheLeuArgSerGluAlaValAlaGlnLeuTrpGlyGlnLysLysLysAsnSerAsn 323
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         363 AAGTTCCTGCGCTCCGAGGCTGTGGCCCAACTATGGGGCCAAAAGAAAAAGAACAGCAAC 422
```

```
Qy         324 MetThrTyrGluLysLeuSerArgAlaMetArgTyrTyrTyrLysArgGluIleLeuGlu 343
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         423 ATGACCTACGAGAAGCTGAGCCGGGCCATGAGGTACTACTACAAACGGAGATCCTGGAA 482

Qy         344 ArgValAspGlyArgArg 349
               ||||||||||||||||||
Db         483 CGGGTGGATGGCCGGCGA 500

RESULT 9
US-09-009-913-2
; Sequence 2, Application US/09009913
; Patent No. 6087485
;  GENERAL INFORMATION:
;    APPLICANT:  AxyS Pharmaceuticals, Inc.
;    TITLE OF INVENTION:  Asthma Related Genes
;    NUMBER OF SEQUENCES:  339
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Bozicevic & Reed, LLP
;      STREET:  285 Hamilton Ave, Suite 200
;      CITY:  Palo Alto
;      STATE:  CA
;      COUNTRY:  USA
;      ZIP:  94301
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Diskette
;      COMPUTER:  IBM Compatible
;      OPERATING SYSTEM:  DOS
;      SOFTWARE:  FastSEQ for Windows Version 2.0
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/009,913
;      FILING DATE:  21-JAN-1998
;      CLASSIFICATION:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:
;      FILING DATE:
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Sherwood, Pamela J
;      REGISTRATION NUMBER:  36,677
;      REFERENCE/DOCKET NUMBER:  SEQ-4P
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  650-327-3231
;      TELEFAX:  650-327-3231
;      TELEX:
;  INFORMATION FOR SEQ ID NO:  2:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  5427 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  double
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  cDNA
US-09-009-913-2

Alignment Scores:
Pred. No.:                8.19e-45       Length:        5427
Score:                    559.00         Matches:       140
Percent Similarity:       47.42%         Conservative:  44
Best Local Similarity:    36.08%         Mismatches:    88
Query Match:              28.23%         Indels:        116
DB:                       3              Gaps:          12

US-08-978-217-2 (1-371) x US-09-009-913-2 (1-5427)

Qy          27 AlaSerValProProAlaAlaThr---------PheGlyAlaAspAspLeuValLeuThr 43
               |||:::   ||||||:::||||||         |||         :::|||   :::
Db          84 GCTGCCTCCCCTCCATCAGCCACAGCTATTGGATTTCCCACCCAGAATCTTTAGGTA--- 140

Qy          44 LeuSerAsnProGlnMetSerLeuGluGly------------------------------ 53
                     |||      |||   |||||||||
Db         141 ------AATGAGATCATGATTCTGGAAGGAGGTGGTGTAATGAATCTCAACCCCGGCAAC 194

Qy          54 --------------------------ThrGluLysAlaSer------------------- 58
                                         |||:::      |||
Db         195 AACCTCCTTCACCAGCCGCCAGCCTGGACAGACAGCTACTCCACGTGCAATGTTTCCAGT 254
```



RESULT 10
US-09-009-913-3
; Sequence 3, Application US/09009913
; Patent No. 6087485

; GENERAL INFORMATION:
; APPLICANT: AxyS Pharmaceuticals, Inc.
; TITLE OF INVENTION: Asthma Related Genes
; NUMBER OF SEQUENCES: 339
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Bozicevic & Reed, LLP
; STREET: 285 Hamilton Ave, Suite 200
; CITY: Palo Alto
; STATE: CA
; COUNTRY: USA
; ZIP: 94301
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS
; SOFTWARE: FastSEQ for Windows Version 2.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/009,913
; FILING DATE: 21-JAN-1998
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER:
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: Sherwood, Pamela J
; REGISTRATION NUMBER: 36,677
; REFERENCE/DOCKET NUMBER: SEQ-4P
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 650-327-3231
; TELEFAX: 650-327-3231
; TELEX:
; INFORMATION FOR SEQ ID NO: 3:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 5510 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: cDNA
US-09-009-913-3

Alignment Scores:

Pred. No.:	1.85e-44	Length:	5510
Score:	555.50	Matches:	126
Percent Similarity:	51.24%	Conservative:	39
Best Local Similarity:	39.13%	Mismatches:	78
Query Match:	28.06%	Indels:	79
DB:	3	Gaps:	8

US-08-978-217-2 (1-371) x US-09-009-913-3 (1-5510)

```
Qy        176 AlaSerProTyrHisProGlySerCysGlyAlaGlyAlaProSerProGlySerSerAsp 195
                  |||
Db        635 ACTGAGCCT---------------------------------------------------- 643

Qy        196 ValSerThrAlaGlyThrGlyAlaSerArgSerSerHisSerSerAspSerGlyGlySer 215
              |||     |||          :::          :::    ||||||
Db        644 ---TCCATCATGAACACCTGGAAAGACGAGAACTATTTATATGACACCAACTATGGTAGC 700

Qy        216 AspValAspLeuAspProThrAspGlyLysLeuProSerAspGlyPheArgAspCys 235
              |||||||||          |||   |||   |||                    |||
Db        701 ACAGTAGATTTG------TTGGACAGCAAAACTTTC--------------------TGC 733

Qy        236 LysLys-----------------------------------GlyAspProLysHisGly 243
              :::                                   :::
Db        734 CGGGCTCAGATCTCCATGACAACCACCAGTCACCTTCCTGTTGCAGAGTCACCTGATATG 793

Qy        244 LysArgLysArgGlyArgProArgLysLeuSerLysGluTyrTrpAspCysLeuGluGly 263
              |||:::::::::      |||   |||         :::
Db        794 AAAAAGGAGCAAGACCCCCCTGCCAAGTGCCACACCAAA-------------------- 832

Qy        264 LysLysSerLysHisAlaProArgGlyThrHisLeuTrpGluPheIleArgAspIleLeu 283
                  ||||||   ||||||||||||||||||||||||||||||||||||||||||||
Db        833 ---------AAGCACAACCCGAGAGGGACTCACTTATGGGAATTCATCCGCGACATCCTC 883

Qy        284 IleHisProGluLeuAsnGluGlyLeuMetLysTrpGluAsnArgHisGluGlyValPhe 303
              ::::::|||:::   |||   ||||||:::|||||||||:::|||   |||||||||||
Db        884 TTGAACCCAGACAAGAACCCAGGATTAATAAAATGGGAAGACCGATCTGAGGGCGTCTTC 943

Qy        304 LysPheLeuArgSerGluAlaValAlaGlnLeuTrpGlyGlnLysLysLysAsnSerAsn 323
              :::||||||:::|||||||||||||||||||||||||||:::||||||   ||||||:::
Db        944 AGGTTCTTGAAATCAGAGGCAGTGGCTCAGCTATGGGGTAAAAAGAAGAACAACAGCAGC 1003

Qy        324 MetThrTyrGluLysLeuSerArgAlaMetArgTyrTyrTyrLysArgGluIleLeuGlu 343
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1004 ATGACCTATGAAAAGCTCAGCCGAGCTATGAGATATTACTACAAAAGAGAAATACTGGAG 1063

Qy        344 ArgValAspGlyArgArgLeuValTyrLysPheGlyLysAsnSerSerGlyTrpLysGlu 363
              ||||||||||||||||||||||||||||||||||||||||||:::   ||||||:::|||
Db       1064 CGTGTGGATGGACGAAGACTGGTATATAAATTTGGGAAGAATGCCCGAGGATGGAGAGAA 1123

Qy        364 GluGlu 365
                |||
Db       1124 AATGAA 1129

RESULT 11
US-09-009-913-4
; Sequence 4, Application US/09009913
; Patent No. 6087485
;  GENERAL INFORMATION:
;    APPLICANT:  AxyS Pharmaceuticals, Inc.
;    TITLE OF INVENTION:  Asthma Related Genes
;    NUMBER OF SEQUENCES:  339
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Bozicevic & Reed, LLP
;      STREET:  285 Hamilton Ave, Suite 200
;      CITY:  Palo Alto
;      STATE:  CA
;      COUNTRY:  USA
;      ZIP:  94301
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Diskette
;      COMPUTER:  IBM Compatible
;      OPERATING SYSTEM:  DOS
;      SOFTWARE:  FastSEQ for Windows Version 2.0
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/009,913
;      FILING DATE:  21-JAN-1998
;      CLASSIFICATION:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:
;      FILING DATE:
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Sherwood, Pamela J
;      REGISTRATION NUMBER:  36,677
;      REFERENCE/DOCKET NUMBER:  SEQ-4P
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  650-327-3231
;      TELEFAX:  650-327-3231
;      TELEX:
;  INFORMATION FOR SEQ ID NO:  4:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  5667 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  double
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  cDNA
US-09-009-913-4

Alignment Scores:
Pred. No.:                1.93e-44      Length:          5667
Score:                    555.50        Matches:         126
Percent Similarity:       51.24%        Conservative:    39
Best Local Similarity:    39.13%        Mismatches:      78
Query Match:              28.06%        Indels:          79
DB:                       3             Gaps:            8

US-08-978-217-2 (1-371) x US-09-009-913-4 (1-5667)

Qy         59 TrpLeuGlyGluGlnProGlnPheTrpSerLysThrGlnValLeuAspTrpIleSerTyr 78
              |||              ||||||:::|||:::|||   ||||||   :::|||:::   :::
Db        513 TGGCATGAAATTCATCCTCAGTACTGGACCAAGTACCAGGTGTGGGAGTGGCTCCAGCAC 572

Qy         79 GlnValGluLysAsnLysTyrAspAlaSerAlaIleAspPheSerArgCysAspMetAsp 98
                 ::::::   |||:::   ||||||:::   |||   |||            |||::::::
Db        573 CTCCTGGACACCAACCAGCTGGATGCCAATTGTATCCCTTTCCAAGAGTTCGACATCAAC 632

Qy         99 GlyAlaThrLeuCysAsnCysAlaLeuGluGluLeuArgLeuValPheGlyProLeuGly 118
              |||      ||||||:::   :::|||:::|||                |||     |||
Db        633 GGCGAGCACCTCTGCAGCATGAGTTTGCAGGAGTTCACCCGGGCGGCAGGGACGGCGGGG 692

Qy        119 AspGlnLeuHisAlaGlnLeuArgAspLeuThr---------SerSerSerSerAspGlu 135
                 |||::::::   |||:::   |||                    |||||||||
Db        693 CAGCTCCTCTACAGCAACTTGCAGCATCTGAAGTGGAACGGCCAGTGCAGTAGTGAC--- 749

Qy        136 LeuSerTrpIleIleGluLeuLeuGluLysAspGlyMetAlaPheGlnGluAlaLeuAsp 155
                                                    ||||||
Db        750 ------------------------------------CTGTTCCAGTCC--------- 761

Qy        156 ProGlyProPheAspGlnGlySerProPheAlaGlnGluLeuLeuAspAspGlyGlnGln 175
                                                  ::::::      :::|||
Db        762 ----------------------------ACACACAATGTCATTGTCAAGACTGAACAA 791

Qy        176 AlaSerProTyrHisProGlySerCysGlyAlaGlyAlaProSerProGlySerSerAsp 195
                  |||
Db        792 ACTGAGCCT---------------------------------------------------- 800

Qy        196 ValSerThrAlaGlyThrGlyAlaSerArgSerSerHisSerSerAspSerGlyGlySer 215
              |||     |||          :::          :::    ||||||
Db        801 ---TCCATCATGAACACCTGGAAAGACGAGAACTATTTATATGACACCAACTATGGTAGC 857

Qy        216 AspValAspLeuAspProThrAspGlyLysLeuProSerAspGlyPheArgAspCys 235
              |||||||||          |||   |||   |||                    |||
Db        858 ACAGTAGATTTG------TTGGACAGCAAAACTTTC--------------------TGC 890

Qy        236 LysLys-----------------------------------GlyAspProLysHisGly 243
              :::                                   :::
Db        891 CGGGCTCAGATCTCCATGACAACCACCAGTCACCTTCCTGTTGCAGAGTCACCTGATATG 950

Qy        244 LysArgLysArgGlyArgProArgLysLeuSerLysGluTyrTrpAspCysLeuGluGly 263
              |||:::::::::      |||   |||         :::
Db        951 AAAAAGGAGCAAGACCCCCCTGCCAAGTGCCACACCAAA-------------------- 989

Qy        264 LysLysSerLysHisAlaProArgGlyThrHisLeuTrpGluPheIleArgAspIleLeu 283
                  ||||||   ||||||||||||||||||||||||||||||||||||||||||||
Db        990 ---------AAGCACAACCCGAGAGGGACTCACTTATGGGAATTCATCCGCGACATCCTC 1040
```

```
Qy        284 IleHisProGluLeuAsnGluGlyLeuMetLysTrpGluAsnArgHisGluGlyValPhe 303
Db       1041 TTGAACCCAGACAAGAACCCAGGATTAATAAAATGGGAAGACCGATCTGAGGGCGTCTTC 1100

Qy        304 LysPheLeuArgSerGluAlaValAlaGlnLeuTrpGlyGlnLysLysLysAsnSerAsn 323
Db       1101 AGGTTCTTGAAATCAGAGGCAGTGGCTCAGCTATGGGGTAAAAAGAAGAACAACAGCAGC 1160

Qy        324 MetThrTyrGluLysLeuSerArgAlaMetArgTyrTyrTyrLysArgGluIleLeuGlu 343
Db       1161 ATGACCTATGAAAAGCTCAGCCGAGCTATGAGATATTACTACAAAAGAGAAATACTGGAG 1220

Qy        344 ArgValAspGlyArgArgLeuValTyrLysPheGlyLysAsnSerSerGlyTrpLysGlu 363
Db       1221 CGTGTGGATGGACGAAGACTGGTATATAAATTTGGGAAGAATGCCCGAGGATGGAGAGAA 1280

Qy        364 GluGlu 365
Db       1281 AATGAA 1286
```

RESULT 12
US-09-020-956-44/c
; Sequence 44, Application US/09020956
; Patent No. 6261562
; GENERAL INFORMATION:
; APPLICANT: Xu, Jiangchun
; APPLICANT: Dillin, Davin C.
; TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY OF PROSTATE CANCER AND METHODS FO
; NUMBER OF SEQUENCES: 178
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: SEED and BERRY LLP
; STREET: 6300 Columbia Center, 701 Fifth Avenue
; CITY: Seattle
; STATE: WA
; COUNTRY: USA
; ZIP: 98104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/020,956
; FILING DATE: 09-FEB-1998
; CLASSIFICATION:
; ATTORNEY/AGENT INFORMATION:
; NAME: Maki, David J.
; REGISTRATION NUMBER: 31,392
; REFERENCE/DOCKET NUMBER: 210121.427C2
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (206) 622-4900
; TELEFAX: (206) 682-6031
; INFORMATION FOR SEQ ID NO: 44:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 852 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: cDNA
; ORIGINAL SOURCE:
; ORGANISM: Homo sapiens
US-09-020-956-44

Alignment Scores:

Pred. No.:	4.04e-42	Length:	852
Score:	519.50	Matches:	121
Percent Similarity:	50.97%	Conservative:	37
Best Local Similarity:	39.03%	Mismatches:	73
Query Match:	26.24%	Indels:	79
DB:	3	Gaps:	8

US-08-978-217-2 (1-371) x US-09-020-956-44 (1-852)

```
Qy         71 GlnValLeuAspTrpIleSerTyrGlnValGluLysAsnLysTyrAspAlaSerAlaIle 90
Db        850 CAGGTGTGGGAGTGGCTCCATCACCTCCTGGACACCAACCAGCTGGATGCCAATTGTATC 791

Qy         91 AspPheSerArgCysAspMetAspGlyAlaThrLeuCysAsnCysAlaLeuGluGluLeu 110
Db        790 CCTTTCCANGAGTTCGACATCAACGGCGAGCACCTTTGCAGCATGAGTTTGCAGGAGTTC 731

Qy        111 ArgLeuValPheGlyProLeuGlyAspGlnLeuHisAlaGlnLeuArgAspLeuThr--- 129
Db        730 ACCCGGGCGGCAGGGACGGCGGGGCANCTCCTCTACAGCAACTTGCAGCATCTGAAGTGG 671

Qy        130 ------SerSerSerSerAspGluLeuSerTrpIleIleGluLeuLeuGluLysAspGly 147
Db        670 AACGGCCAGTGCAGTAGTGAC---------------------------------------- 650

Qy        148 MetAlaPheGlnGluAlaLeuAspProGlyProPheAspGlnGlySerProPheAlaGln 167
Db        649 ---CTGTTCCAGTCC---------------------------------------ACACAC 632

Qy        168 GluLeuLeuAspAspGlyGlnGlnAlaSerProTyrHisProGlySerCysGlyAlaGly 187
Db        631 AATGTCATTGTCAAGACTGAACAAACTGAGCCT-------------------------- 599

Qy        188 AlaProSerProGlySerSerAspValSerThrAlaGlyThrGlyAlaSerArgSerSer 207
Db        598 --------------------------TCCATCATGAACACCTGGAAAGACNAGAACTAT 566

Qy        208 HisSerSerAspSerGlyGlySerAspValAspLeuAspProThrAspGlyLysLeuPhe 227
Db        565 TTATATGACACCAACTATGGTAGCACAGTAGATTTG------TTGGACAGCAAAACTTTC 512

Qy        228 ProSerAspGlyPheArgAspCysLysLys---------------------------- 237
Db        511 --------------------TGCCGGGCTCAGATCTCCATGACAACCACCAGTCACCTT 473

Qy        238 ------GlyAspProLysHisGlyLysArgLysArgGlyArgProArgLysLeuSerLys 255
Db        472 CCTGTTGCAGAGTCACCTGATATGAAAAAGGAGCAAGACCCCCCTGCCAAGTGCCACACC 413

Qy        256 GluTyrTrpAspCysLeuGluGlyLysLysSerLysHisAlaProArgGlyThrHisLeu 275
Db        412 AAA----------------------------AAGCACAACCCGAGAGGGACTCACTTA 383

Qy        276 TrpGluPheIleArgAspIleLeuIleHisProGluLeuAsnGluGlyLeuMetLysTrp 295
Db        382 TGGGAATTCATCCGCGACATCCTCTTGAACCCAGACAAGAACCCAGGATTAATAAAATGG 323

Qy        296 GluAsnArgHisGluGlyValPheLysPheLeuArgSerGluAlaValAlaGlnLeuTrp 315
Db        322 GAAGACCGATCTGAGGGCGTCTTCAGGTTCTTGAAATCAGAGGCAGTGGCTCAGCTATGG 263

Qy        316 GlyGlnLysLysLysAsnSerAsnMetThrTyrGluLysLeuSerArgAlaMetArgTyr 335
Db        262 GGTAAAAAGAAGAACAACAGCAGCATGACCTATGAAAAGCTCAGCCGAGCTATGAGATAT 203

Qy        336 TyrTyrLysArgGluIleLeuGluArgValAspGlyArgArgLeuValTyrLysPheGly 355
Db        202 TACTACAAAAGAGAAATTCTGGAGCGTGTGGATGGACGAAGACTGGTATATAAATTTGGG 143

Qy        356 LysAsnSerSerGlyTrpLysGluGluGlu 365
Db        142 AAGAATGCCCGAGGATGGAGAGAAAATGAA 113
```

RESULT 13
US-09-030-607-44/c
; Sequence 44, Application US/09030607
; Patent No. 6262245
; GENERAL INFORMATION:
; APPLICANT: Xu, Jiangchun
; APPLICANT: Dillon, Davin C.
; TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY OF PROSTATE CANCER AND METHODS FO

```
;    NUMBER OF SEQUENCES:  224
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  SEED and BERRY LLP
;      STREET:  6300 Columbia Center, 701 Fifth Avenue
;      CITY:  Seattle
;      STATE:  WA
;      COUNTRY:  USA
;      ZIP:  98104
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.30
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/030,607
;      FILING DATE:  25-FEB-1998
;      CLASSIFICATION:
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Maki, David J.
;      REGISTRATION NUMBER:  31,392
;      REFERENCE/DOCKET NUMBER:  210121.427C3
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (206) 622-4900
;      TELEFAX:  (206) 682-6031
;  INFORMATION FOR SEQ ID NO:  44:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  852 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  cDNA
;    ORIGINAL SOURCE:
;      ORGANISM:  Homo sapiens
US-09-030-607-44

Alignment Scores:
Pred. No.:              4.04e-42        Length:         852
Score:                  519.50          Matches:        121
Percent Similarity:     50.97%          Conservative:   37
Best Local Similarity:  39.03%          Mismatches:     73
Query Match:            26.24%          Indels:         79
DB:                     3               Gaps:           8

US-08-978-217-2 (1-371) x US-09-030-607-44 (1-852)

Qy         71 GlnValLeuAspTrpIleSerTyrGlnValGluLysAsnLysTyrAspAlaSerAlaIle 90
              ||||||   :::|||:::   :::   ::::::   |||:::   ||||||:::   |||
Db        850 CAGGTGTGGGAGTGGCTCCATCACCTCCTGGACACCAACCAGCTGGATGCCAATTGTATC 791

Qy         91 AspPheSerArgCysAspMetAspGlyAlaThrLeuCysAsnCysAlaLeuGluGluLeu 110
                |||         |||::::::|||       ||||||:::   :::|||:::|||
Db        790 CCTTTCCANGAGTTCGACATCAACGGCGAGCACCTTTGCAGCATGAGTTTGCAGGAGTTC 731

Qy        111 ArgLeuValPheGlyProLeuGlyAspGlnLeuHisAlaGlnLeuArgAspLeuThr--- 129
                       |||       |||       |||::::::   |||:::   |||
Db        730 ACCCGGGCGGCAGGGACGGCGGGGCANCTCCTCTACAGCAACTTGCAGCATCTGAAGTGG 671

Qy        130 ------SerSerSerSerAspGluLeuSerTrpIleIleGluLeuLeuGluLysAspGly 147
                    |||||||||
Db        670 AACGGCCAGTGCAGTAGTGAC------------------------------------ 650

Qy        148 MetAlaPheGlnGluAlaLeuAspProGlyProPheAspGlnGlySerProPheAlaGln 167
                  ||||||
Db        649 ---CTGTTCCAGTCC------------------------------------ACACAC 632

Qy        168 GluLeuLeuAspAspGlyGlnGlnAlaSerProTyrHisProGlySerCysGlyAlaGly 187
                 ::::::         :::|||      |||
Db        631 AATGTCATTGTCAAGACTGAACAAACTGAGCCT------------------------- 599

Qy        188 AlaProSerProGlySerSerAspValSerThrAlaGlyThrGlyAlaSerArgSerSer 207
                                          |||         |||          :::
Db        598 -------------------------TCCATCATGAACACCTGGAAAGACNAGAACTAT 566

Qy        208 HisSerSerAspSerGlyGlySerAspValAspLeuAspProThrAspGlyLysLeuPhe 227
                        :::   ||||||   |||||||||          |||   |||   |||
Db        565 TTATATGACACCAACTATGGTAGCACAGTAGATTTG------TTGGACAGCAAAACTTTC 512

Qy        228 ProSerAspGlyPheArgAspCysLysLys---------------------------- 237
                              |||:::
Db        511 --------------------TGCCGGGCTCAGATCTCCATGACAACCACCAGTCACCTT 473

Qy        238 ------GlyAspProLysHisGlyLysArgLysArgGlyArgProArgLysLeuSerLys 255
                    :::          |||:::::::::      |||   |||
Db        472 CCTGTTGCAGAGTCACCTGATATGAAAAAGGAGCAAGACCCCCCTGCCAAGTGCCACACC 413

Qy        256 GluTyrTrpAspCysLeuGluGlyLysLysSerLysHisAlaProArgGlyThrHisLeu 275
                 :::                      ||||||   ||||||||||||||||||
Db        412 AAA----------------------------AAGCACAACCCGAGAGGGACTCACTTA 383

Qy        276 TrpGluPheIleArgAspIleLeuIleHisProGluLeuAsnGluGlyLeuMetLysTrp 295
              ||||||||||||||||||||||||:::::|||:::   |||   ||||||:::||||||
Db        382 TGGGAATTCATCCGCGACATCCTCTTGAACCCAGACAAGAACCCAGGATTAATAAAATGG 323

Qy        296 GluAsnArgHisGluGlyValPheLysPheLeuArgSerGluAlaValAlaGlnLeuTrp 315
              |||:::|||   |||||||||||:::|||||:::||||||||||||||||||||||||
Db        322 GAAGACCGATCTGAGGGCGTCTTCAGGTTCTTGAAATCAGAGGCAGTGGCTCAGCTATGG 263

Qy        316 GlyGlnLysLysLysAsnSerAsnMetThrTyrGluLysLeuSerArgAlaMetArgTyr 335
              |||:::||||||   ||||||:::|||||||||||||||||||||||||||||||||||
Db        262 GGTAAAAAGAAGAACAACAGCAGCATGACCTATGAAAAGCTCAGCCGAGCTATGAGATAT 203

Qy        336 TyrTyrLysArgGluIleLeuGluArgValAspGlyArgArgLeuValTyrLysPheGly 355
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        202 TACTACAAAAGAGAAATTCTGGAGCGTGTGGATGGACGAAGACTGGTATATAAATTTGGG 143

Qy        356 LysAsnSerSerGlyTrpLysGluGluGlu 365
              ||||||:::   ||||||:::|||   |||
Db        142 AAGAATGCCCGAGGATGGAGAGAAAATGAA 113

RESULT 14
US-09-439-313-44/c
; Sequence 44, Application US/09439313
; Patent No. 6329505
; GENERAL INFORMATION:
;  APPLICANT: Xu, Jiangchun
;  APPLICANT:  Dillon, Davin C.
;  APPLICANT:  Mitcham, Jennifer L.
;  APPLICANT:  Harlocker, Susan Louise
;  APPLICANT:  Jiang Yuqui
;  APPLICANT:  Reed, Steven G.
;  APPLICANT:  Kalos, Michael
;  APPLICANT:  Fanger, Gary
;  APPLICANT:  Retter, Mark
;  APPLICANT:  Solk, John
;  APPLICANT:  Day, Craig
;  TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THERAPY AND
;  TITLE OF INVENTION:  DIAGNOSIS OF PROSTATE CANCER
;  FILE REFERENCE: 210121.427C9
;  CURRENT APPLICATION NUMBER: US/09/439,313
;  CURRENT FILING DATE:  1999-11-12
;  NUMBER OF SEQ ID NOS: 575
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 44
;   LENGTH: 852
;   TYPE: DNA
;   ORGANISM: Homo sapien
;   FEATURE:
;   NAME/KEY: misc_feature
;   LOCATION: (1)...(852)
;   OTHER INFORMATION: n = A,T,C or G
US-09-439-313-44

Alignment Scores:
Pred. No.:              4.04e-42        Length:         852
Score:                  519.50          Matches:        121
Percent Similarity:     50.97%          Conservative:   37
```

```
Best Local Similarity:  39.03%          Mismatches:     73
Query Match:            26.24%          Indels:         79
DB:                     4               Gaps:           8

US-08-978-217-2 (1-371) x US-09-439-313-44 (1-852)

Qy          71 GlnValLeuAspTrpIleSerTyrGlnValGluLysAsnLysTyrAspAlaSerAlaIle 90
Db         850 CAGGTGTGGGAGTGGCTCCATCACCTCCTGGACACCAACCAGCTGGATGCCAATTGTATC 791

Qy          91 AspPheSerArgCysAspMetAspGlyAlaThrLeuCysAsnCysAlaLeuGluGluLeu 110
Db         790 CCTTTCCANGAGTTCGACATCAACGGCGAGCACCTTTGCAGCATGAGTTTGCAGGAGTTC 731

Qy         111 ArgLeuValPheGlyProLeuGlyAspGlnLeuHisAlaGlnLeuArgAspLeuThr--- 129
Db         730 ACCCGGGCGGCAGGGACGGCGGGGCANCTCCTCTACAGCAACTTGCAGCATCTGAAGTGG 671

Qy         130 ------SerSerSerSerAspGluLeuSerTrpIleIleGluLeuLeuGluLysAspGly 147
Db         670 AACGGCCAGTGCAGTAGTGAC------------------------------------ 650

Qy         148 MetAlaPheGlnGluAlaLeuAspProGlyProPheAspGlnGlySerProPheAlaGln 167
Db         649 ---CTGTTCCAGTCC------------------------------------ACACAC 632

Qy         168 GluLeuLeuAspAspGlyGlnGlnAlaSerProTyrHisProGlySerCysGlyAlaGly 187
Db         631 AATGTCATTGTCAAGACTGAACAAACTGAGCCT-------------------------- 599

Qy         188 AlaProSerProGlySerSerAspValSerThrAlaGlyThrGlyAlaSerArgSerSer 207
Db         598 -------------------------TCCATCATGAACACCTGGAAAGACNAGAACTAT 566

Qy         208 HisSerSerAspSerGlyGlySerAspValAspLeuAspProThrAspGlyLysLeuPhe 227
Db         565 TTATATGACACCAACTATGGTAGCACAGTAGATTTG------TTGGACAGCAAAACTTTC 512

Qy         228 ProSerAspGlyPheArgAspCysLysLys---------------------------- 237
Db         511 --------------------TGCCGGGCTCAGATCTCCATGACAACCACCAGTCACCTT 473

Qy         238 ------GlyAspProLysHisGlyLysArgLysArgGlyArgProArgLysLeuSerLys 255
Db         472 CCTGTTGCAGAGTCACCTGATATGAAAAAGGAGCAAGACCCCCCTGCCAAGTGCCACACC 413

Qy         256 GluTyrTrpAspCysLeuGluGlyLysLysSerLysHisAlaProArgGlyThrHisLeu 275
Db         412 AAA-----------------------------AAGCACAACCCGAGAGGGACTCACTTA 383

Qy         276 TrpGluPheIleArgAspIleLeuIleHisProGluLeuAsnGluGlyLeuMetLysTrp 295
Db         382 TGGGAATTCATCCGCGACATCCTCTTGAACCCAGACAAGAACCCAGGATTAATAAAATGG 323

Qy         296 GluAsnArgHisGluGlyValPheLysPheLeuArgSerGluAlaValAlaGlnLeuTrp 315
Db         322 GAAGACCGATCTGAGGGCGTCTTCAGGTTCTTGAAATCAGAGGCAGTGGCTCAGCTATGG 263

Qy         316 GlyGlnLysLysLysAsnSerAsnMetThrTyrGluLysLeuSerArgAlaMetArgTyr 335
Db         262 GGTAAAAAGAAGAACAACAGCAGCATGACCTATGAAAAGCTCAGCCGAGCTATGAGATAT 203

Qy         336 TyrTyrLysArgGluIleLeuGluArgValAspGlyArgArgLeuValTyrLysPheGly 355
Db         202 TACTACAAAAGAGAAATTCTGGAGCGTGTGGATGGACGAAGACTGGTATATAAATTTGGG 143

Qy         356 LysAsnSerSerGlyTrpLysGluGluGlu 365
Db         142 AAGAATGCCCGAGGATGGAGAGAAAATGAA 113

RESULT 15
US-09-352-616A-44/c
; Sequence 44, Application US/09352616A
```

```
; Patent No. 6395278
; GENERAL INFORMATION:
;  APPLICANT:  Dillon, Davin C.
;  APPLICANT:  Harlocker, Susan Louise
;  APPLICANT:  Jiang, Yuqui
;  APPLICANT:  Xu, Jiangchun
;  APPLICANT:  Mitcham, Jennifer Lynn
;  TITLE OF INVENTION:  COMPOUNDS FOR IMMUNOTHERAPY AND DIAGNOSIS
;  TITLE OF INVENTION:  OF PROSTATE CANCER AND METHODS FOR THEIR USE
;  FILE REFERENCE:  210121.427C8
;  CURRENT APPLICATION NUMBER: US/09/352,616A
;  CURRENT FILING DATE:  1999-07-13
;  NUMBER OF SEQ ID NOS:  472
;  SOFTWARE:  FastSEQ for Windows Version 3.0
; SEQ ID NO 44
;   LENGTH: 852
;   TYPE: DNA
;   ORGANISM: Homo sapien
;   FEATURE:
;   NAME/KEY: misc_feature
;   LOCATION: (1)...(852)
;   OTHER INFORMATION: n = A,T,C or G
US-09-352-616A-44

Alignment Scores:
Pred. No.:              4.04e-42        Length:         852
Score:                  519.50          Matches:        121
Percent Similarity:     50.97%          Conservative:   37
Best Local Similarity:  39.03%          Mismatches:     73
Query Match:            26.24%          Indels:         79
DB:                     4               Gaps:           8

US-08-978-217-2 (1-371) x US-09-352-616A-44 (1-852)

Qy          71 GlnValLeuAspTrpIleSerTyrGlnValGluLysAsnLysTyrAspAlaSerAlaIle 90
Db         850 CAGGTGTGGGAGTGGCTCCATCACCTCCTGGACACCAACCAGCTGGATGCCAATTGTATC 791

Qy          91 AspPheSerArgCysAspMetAspGlyAlaThrLeuCysAsnCysAlaLeuGluGluLeu 110
Db         790 CCTTTCCANGAGTTCGACATCAACGGCGAGCACCTTTGCAGCATGAGTTTGCAGGAGTTC 731

Qy         111 ArgLeuValPheGlyProLeuGlyAspGlnLeuHisAlaGlnLeuArgAspLeuThr--- 129
Db         730 ACCCGGGCGGCAGGGACGGCGGGGCANCTCCTCTACAGCAACTTGCAGCATCTGAAGTGG 671

Qy         130 ------SerSerSerSerAspGluLeuSerTrpIleIleGluLeuLeuGluLysAspGly 147
Db         670 AACGGCCAGTGCAGTAGTGAC------------------------------------ 650

Qy         148 MetAlaPheGlnGluAlaLeuAspProGlyProPheAspGlnGlySerProPheAlaGln 167
Db         649 ---CTGTTCCAGTCC------------------------------------ACACAC 632

Qy         168 GluLeuLeuAspAspGlyGlnGlnAlaSerProTyrHisProGlySerCysGlyAlaGly 187
Db         631 AATGTCATTGTCAAGACTGAACAAACTGAGCCT-------------------------- 599

Qy         188 AlaProSerProGlySerSerAspValSerThrAlaGlyThrGlyAlaSerArgSerSer 207
Db         598 -------------------------TCCATCATGAACACCTGGAAAGACNAGAACTAT 566

Qy         208 HisSerSerAspSerGlyGlySerAspValAspLeuAspProThrAspGlyLysLeuPhe 227
Db         565 TTATATGACACCAACTATGGTAGCACAGTAGATTTG------TTGGACAGCAAAACTTTC 512

Qy         228 ProSerAspGlyPheArgAspCysLysLys---------------------------- 237
Db         511 --------------------TGCCGGGCTCAGATCTCCATGACAACCACCAGTCACCTT 473

Qy         238 ------GlyAspProLysHisGlyLysArgLysArgGlyArgProArgLysLeuSerLys 255
Db         472 CCTGTTGCAGAGTCACCTGATATGAAAAAGGAGCAAGACCCCCCTGCCAAGTGCCACACC 413
```

```
Qy        256 GluTyrTrpAspCysLeuGluGlyLysLysSerLysHisAlaProArgGlyThrHisLeu 275
              :::                              ||||||   |||||||||||||||||
Db        412 AAA------------------------------AAGCACAACCCGAGAGGGACTCACTTA 383

Qy        276 TrpGluPheIleArgAspIleLeuIleHisProGluLeuAsnGluGlyLeuMetLysTrp 295
              ||||||||||||||||||||||:::::|||:::   |||   ||||||:::|||||
Db        382 TGGGAATTCATCCGCGACATCCTCTTGAACCCAGACAAGAACCCAGGATTAATAAAATGG 323

Qy        296 GluAsnArgHisGluGlyValPheLysPheLeuArgSerGluAlaValAlaGlnLeuTrp 315
              |||:::|||   ||||||||||:::||||||:::||||||||||||||||||||||||
Db        322 GAAGACCGATCTGAGGGCGTCTTCAGGTTCTTGAAATCAGAGGCAGTGGCTCAGCTATGG 263

Qy        316 GlyGlnLysLysLysAsnSerAsnMetThrTyrGluLysLeuSerArgAlaMetArgTyr 335
              |||:::||||||   ||||||:::||||||||||||||||||||||||||||||||||
Db        262 GGTAAAAAGAAGAACAACAGCAGCATGACCTATGAAAAGCTCAGCCGAGCTATGAGATAT 203

Qy        336 TyrTyrLysArgGluIleLeuGluArgValAspGlyArgArgLeuValTyrLysPheGly 355
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        202 TACTACAAAAGAGAAATTCTGGAGCGTGTGGATGGACGAAGACTGGTATATAAATTTGGG 143

Qy        356 LysAsnSerSerGlyTrpLysGluGluGlu 365
              ||||||:::   ||||||:::|||   |||
Db        142 AAGAATGCCCGAGGATGGAGAGAAAATGAA 113
```

Search completed: February 12, 2004, 21:49:55
Job time : 105.522 secs

GenCore version 5.1.6

OM nucleic - nucleic search, using sw model

Run on: February 12, 2004, 21:46:16 ; Search time 64.1925 Seconds
(without alignments)
7673.534 Million cell updates/sec

Title: US-08-978-217-1
Perfect score: 1116
Sequence: 1 ATGGCTGCAACCTGTGAGAT.....TTCTCCAGAGTCGGAACTGA 1116

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 569978 seqs, 220691566 residues

Total number of hits satisfying chosen parameters: 1139956

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Issued_Patents_NA:*
1: /cgn2_6/ptodata/1/ina/5A_COMB.seq:*
2: /cgn2_6/ptodata/1/ina/5B_COMB.seq:*
3: /cgn2_6/ptodata/1/ina/6A_COMB.seq:*
4: /cgn2_6/ptodata/1/ina/6B_COMB.seq:*
5: /cgn2_6/ptodata/1/ina/PCTUS_COMB.seq:*
6: /cgn2_6/ptodata/1/ina/backfiles1.seq:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	1116	100.0	1907	4	US-09-300-958A-27	Sequence 27, Appl
2	1116	100.0	1907	4	US-09-570-593-4	Sequence 4, Appli
3	1109.6	99.4	1920	1	US-08-746-789A-1	Sequence 1, Appli
4	499.4	44.7	502	4	US-09-389-681-282	Sequence 282, App
5	499.4	44.7	502	4	US-09-620-405B-282	Sequence 282, App
6	499.4	44.7	502	4	US-09-339-338-282	Sequence 282, App
7	499.4	44.7	502	4	US-09-433-826B-282	Sequence 282, App
8	499.4	44.7	502	4	US-09-604-287A-282	Sequence 282, App
c 9	173.8	15.6	852	3	US-09-020-956-44	Sequence 44, Appl
c 10	173.8	15.6	852	3	US-09-030-607-44	Sequence 44, Appl
c 11	173.8	15.6	852	4	US-09-439-313-44	Sequence 44, Appl
c 12	173.8	15.6	852	4	US-09-352-616A-44	Sequence 44, Appl
c 13	173.8	15.6	852	4	US-09-232-149A-44	Sequence 44, Appl
14	173.8	15.6	5427	3	US-09-009-913-2	Sequence 2, Appli
15	173.8	15.6	5510	3	US-09-009-913-3	Sequence 3, Appli
16	173.8	15.6	5667	3	US-09-009-913-4	Sequence 4, Appli
17	166	14.9	237	4	US-09-016-434-927	Sequence 927, App
18	162.6	14.6	848	3	US-09-009-913-338	Sequence 338, App
19	101.2	9.1	2280	3	US-09-009-913-8	Sequence 8, Appli
20	101.2	9.1	2428	3	US-09-009-913-6	Sequence 6, Appli
21	101.2	9.1	2498	3	US-09-009-913-10	Sequence 10, Appl
22	84.8	7.6	2266	2	US-09-213-767-1	Sequence 1, Appli
23	78.2	7.0	1894	4	US-09-570-593-1	Sequence 1, Appli
24	78.2	7.0	1905	3	US-09-055-113-2	Sequence 2, Appli
25	78.2	7.0	3317	4	US-09-570-593-12	Sequence 12, Appl
26	73.4	6.6	2975	1	US-08-368-281-1	Sequence 1, Appli
27	73.4	6.6	3240	1	US-08-368-281-3	Sequence 3, Appli
28	69.4	6.2	252	4	US-09-016-434-307	Sequence 307, App
29	68.2	6.1	1933	4	US-09-920-759-3	Sequence 3, Appli
30	68.2	6.1	1976	4	US-09-920-759-10	Sequence 10, Appl
31	66.6	6.0	1752	3	US-09-360-779-1	Sequence 1, Appli
32	66.6	6.0	1752	4	US-09-435-335-1	Sequence 1, Appli
33	65.6	5.9	2268	3	US-09-344-579-1	Sequence 1, Appli
34	65.4	5.9	792	4	US-09-016-434-840	Sequence 840, App
35	63.4	5.7	2938	2	US-08-343-443B-3	Sequence 3, Appli
36	59.8	5.4	2667	2	US-08-469-412A-1	Sequence 1, Appli
37	59.8	5.4	2667	3	US-09-021-715-1	Sequence 1, Appli
38	59.4	5.3	2064	3	US-08-875-944B-1	Sequence 1, Appli
39	59.4	5.3	2064	3	US-09-116-049-3	Sequence 3, Appli
40	59.4	5.3	2064	4	US-09-602-868A-1	Sequence 1, Appli
41	59.4	5.3	2064	4	US-09-884-363-3	Sequence 3, Appli
42	58	5.2	463	4	US-09-300-958A-25	Sequence 25, Appl
43	58	5.2	665	4	US-09-920-759-11	Sequence 11, Appl
44	57.8	5.2	2532	4	US-09-620-312D-869	Sequence 869, App
45	53.6	4.8	1447	3	US-08-878-177-1	Sequence 1, Appli

ALIGNMENTS

RESULT 1
US-09-300-958A-27
; Sequence 27, Application US/09300958A
; Patent No. 6495319
; GENERAL INFORMATION:
; APPLICANT: McClelland, Michael
; APPLICANT: Welsh, John
; APPLICANT: Trenkle, Thomas
; TITLE OF INVENTION: Reduced Complexity Nucleic Acid Targets and Methods of
; TITLE OF INVENTION: Using Same
; FILE REFERENCE: P-PH 3457
; CURRENT APPLICATION NUMBER: US/09/300,958A
; CURRENT FILING DATE: 1999-04-27
; PRIOR APPLICATION NUMBER: 60/083,331
; PRIOR FILING DATE: 1998-04-27
; PRIOR APPLICATION NUMBER: 60/098,070
; PRIOR FILING DATE: 1998-08-27
; PRIOR APPLICATION NUMBER: 60/118,624
; PRIOR FILING DATE: 1999-02-04
; NUMBER OF SEQ ID NOS: 85
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 27
; LENGTH: 1907
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-300-958A-27

Query Match 100.0%; Score 1116; DB 4; Length 1907;
Best Local Similarity 100.0%; Pred. No. 1.6e-273;
Matches 1116; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy          1 ATGGCTGCAACCTGTGAGATTAGCAACATTTTTAGCAACTACTTCAGTGCGATGTACAGC 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         96 ATGGCTGCAACCTGTGAGATTAGCAACATTTTTAGCAACTACTTCAGTGCGATGTACAGC 155

Qy         61 TCGGAGGACTCCACCCTGGCCTCTGTTCCCCCTGCTGCCACCTTTGGGGCCGATGACTTG 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        156 TCGGAGGACTCCACCCTGGCCTCTGTTCCCCCTGCTGCCACCTTTGGGGCCGATGACTTG 215

Qy        121 GTACTGACCCTGAGCAACCCCCAGATGTCATTGGAGGGTACAGAGAAGGCCAGCTGGTTG 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        216 GTACTGACCCTGAGCAACCCCCAGATGTCATTGGAGGGTACAGAGAAGGCCAGCTGGTTG 275

Qy        181 GGGGAACAGCCCCAGTTCTGGTCGAAGACGCAGGTTCTGGACTGGATCAGCTACCAAGTG 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        276 GGGGAACAGCCCCAGTTCTGGTCGAAGACGCAGGTTCTGGACTGGATCAGCTACCAAGTG 335

Qy        241 GAGAAGAACAAGTACGACGCAAGCGCCATTGACTTCTCACGATGTGACATGGATGGCGCC 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        336 GAGAAGAACAAGTACGACGCAAGCGCCATTGACTTCTCACGATGTGACATGGATGGCGCC 395
```

```
Qy        301 ACCCTCTGCAATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGCCTCTGGGGGACCAA 360
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        396 ACCCTCTGCAATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGCCTCTGGGGGACCAA 455

Qy        361 CTCCATGCCCAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATT 420
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        456 CTCCATGCCCAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATT 515

Qy        421 GAGCTGCTGGAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCCTTTGAC 480
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        516 GAGCTGCTGGAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCCTTTGAC 575

Qy        481 CAGGGCAGCCCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCAC 540
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        576 CAGGGCAGCCCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCAC 635

Qy        541 CCCGGCAGCTGTGGCGCAGGAGCCCCCTCCCCTGGCAGCTCTGACGTCTCCACCGCAGGG 600
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        636 CCCGGCAGCTGTGGCGCAGGAGCCCCCTCCCCTGGCAGCTCTGACGTCTCCACCGCAGGG 695

Qy        601 ACTGGTGCTTCTCGGAGCTCCCACTCCTCAGACTCCGGTGGAAGTGACGTGGACCTGGAT 660
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        696 ACTGGTGCTTCTCGGAGCTCCCACTCCTCAGACTCCGGTGGAAGTGACGTGGACCTGGAT 755

Qy        661 CCCACTGATGGCAAGCTCTTCCCCAGCGATGGTTTTCGTGACTGCAAGAAGGGGGATCCC 720
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        756 CCCACTGATGGCAAGCTCTTCCCCAGCGATGGTTTTCGTGACTGCAAGAAGGGGGATCCC 815

Qy        721 AAGCACGGGAAGCGGAAACGAGGCCGGCCCCGAAAGCTGAGCAAAGAGTACTGGGACTGT 780
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        816 AAGCACGGGAAGCGGAAACGAGGCCGGCCCCGAAAGCTGAGCAAAGAGTACTGGGACTGT 875

Qy        781 CTCGAGGGCAAGAAGAGCAAGCACGCGCCCAGAGGCACCCACCTGTGGGAGTTCATCCGG 840
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        876 CTCGAGGGCAAGAAGAGCAAGCACGCGCCCAGAGGCACCCACCTGTGGGAGTTCATCCGG 935

Qy        841 GACATCCTCATCCACCCGGAGCTCAACGAGGGCCTCATGAAGTGGGAGAATCGGCATGAA 900
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        936 GACATCCTCATCCACCCGGAGCTCAACGAGGGCCTCATGAAGTGGGAGAATCGGCATGAA 995

Qy        901 GGCGTCTTCAAGTTCCTGCGCTCCGAGGCTGTGGCCCAACTATGGGGCCAAAAGAAAAAG 960
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        996 GGCGTCTTCAAGTTCCTGCGCTCCGAGGCTGTGGCCCAACTATGGGGCCAAAAGAAAAAG 1055

Qy        961 AACAGCAACATGACCTACGAGAAGCTGAGCCGGGCCATGAGGTACTACTACAAACGGGAG 1020
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1056 AACAGCAACATGACCTACGAGAAGCTGAGCCGGGCCATGAGGTACTACTACAAACGGGAG 1115

Qy       1021 ATCCTGGAACGGGTGGATGGCCGGCGACTCGTCTACAAGTTTGGCAAAAACTCAAGCGGC 1080
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1116 ATCCTGGAACGGGTGGATGGCCGGCGACTCGTCTACAAGTTTGGCAAAAACTCAAGCGGC 1175

Qy       1081 TGGAAGGAGGAAGAGGTTCTCCAGAGTCGGAACTGA 1116
              ||||||||||||||||||||||||||||||||||||
Db       1176 TGGAAGGAGGAAGAGGTTCTCCAGAGTCGGAACTGA 1211
```

```
RESULT 2
US-09-570-593-4
; Sequence 4, Application US/09570593
; Patent No. 6566063
; GENERAL INFORMATION:
;  APPLICANT:  Kaufmann, Joerg
;  APPLICANT:  Xin, Hong
;  APPLICANT:  Harrowe, Greg
;  TITLE OF INVENTION:  EXPRESSION OF ETS-DOMAIN PROTEINS IN
;  TITLE OF INVENTION:  CANCER
;  FILE REFERENCE:  2300-1556
;  CURRENT APPLICATION NUMBER: US/09/570,593
;  CURRENT FILING DATE:  2000-05-12
;  PRIOR APPLICATION NUMBER:  60/134,112
;  PRIOR FILING DATE:  1999-05-14
;  NUMBER OF SEQ ID NOS:  13
;  SOFTWARE:  FastSEQ for Windows Version 4.0
; SEQ ID NO 4
;   LENGTH: 1907
;   TYPE: DNA
;   ORGANISM: Homo sapiens
;   FEATURE:
;   NAME/KEY: CDS
;   LOCATION: (96)...(1211)
;   OTHER INFORMATION: Human epithelial-restricted with serine box (ESX)
;   OTHER INFORMATION: protein.
US-09-570-593-4

  Query Match             100.0%;  Score 1116;  DB 4;  Length 1907;
  Best Local Similarity   100.0%;  Pred. No. 1.6e-273;
  Matches 1116;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 ATGGCTGCAACCTGTGAGATTAGCAACATTTTTAGCAACTACTTCAGTGCGATGTACAGC 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         96 ATGGCTGCAACCTGTGAGATTAGCAACATTTTTAGCAACTACTTCAGTGCGATGTACAGC 155

Qy         61 TCGGAGGACTCCACCCTGGCCTCTGTTCCCCCTGCTGCCACCTTTGGGGCCGATGACTTG 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        156 TCGGAGGACTCCACCCTGGCCTCTGTTCCCCCTGCTGCCACCTTTGGGGCCGATGACTTG 215

Qy        121 GTACTGACCCTGAGCAACCCCCAGATGTCATTGGAGGGTACAGAGAAGGCCAGCTGGTTG 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        216 GTACTGACCCTGAGCAACCCCCAGATGTCATTGGAGGGTACAGAGAAGGCCAGCTGGTTG 275

Qy        181 GGGGAACAGCCCCAGTTCTGGTCGAAGACGCAGGTTCTGGACTGGATCAGCTACCAAGTG 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        276 GGGGAACAGCCCCAGTTCTGGTCGAAGACGCAGGTTCTGGACTGGATCAGCTACCAAGTG 335

Qy        241 GAGAAGAACAAGTACGACGCAAGCGCCATTGACTTCTCACGATGTGACATGGATGGCGCC 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        336 GAGAAGAACAAGTACGACGCAAGCGCCATTGACTTCTCACGATGTGACATGGATGGCGCC 395

Qy        301 ACCCTCTGCAATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGCCTCTGGGGGACCAA 360
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        396 ACCCTCTGCAATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGCCTCTGGGGGACCAA 455

Qy        361 CTCCATGCCCAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATT 420
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        456 CTCCATGCCCAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATT 515

Qy        421 GAGCTGCTGGAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCCTTTGAC 480
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        516 GAGCTGCTGGAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCCTTTGAC 575

Qy        481 CAGGGCAGCCCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCAC 540
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        576 CAGGGCAGCCCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCAC 635

Qy        541 CCCGGCAGCTGTGGCGCAGGAGCCCCCTCCCCTGGCAGCTCTGACGTCTCCACCGCAGGG 600
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        636 CCCGGCAGCTGTGGCGCAGGAGCCCCCTCCCCTGGCAGCTCTGACGTCTCCACCGCAGGG 695

Qy        601 ACTGGTGCTTCTCGGAGCTCCCACTCCTCAGACTCCGGTGGAAGTGACGTGGACCTGGAT 660
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        696 ACTGGTGCTTCTCGGAGCTCCCACTCCTCAGACTCCGGTGGAAGTGACGTGGACCTGGAT 755

Qy        661 CCCACTGATGGCAAGCTCTTCCCCAGCGATGGTTTTCGTGACTGCAAGAAGGGGGATCCC 720
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        756 CCCACTGATGGCAAGCTCTTCCCCAGCGATGGTTTTCGTGACTGCAAGAAGGGGGATCCC 815

Qy        721 AAGCACGGGAAGCGGAAACGAGGCCGGCCCCGAAAGCTGAGCAAAGAGTACTGGGACTGT 780
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        816 AAGCACGGGAAGCGGAAACGAGGCCGGCCCCGAAAGCTGAGCAAAGAGTACTGGGACTGT 875

Qy        781 CTCGAGGGCAAGAAGAGCAAGCACGCGCCCAGAGGCACCCACCTGTGGGAGTTCATCCGG 840
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        876 CTCGAGGGCAAGAAGAGCAAGCACGCGCCCAGAGGCACCCACCTGTGGGAGTTCATCCGG 935
```

```
Qy        841 GACATCCTCATCCACCCGGAGCTCAACGAGGGCCTCATGAAGTGGGAGAATCGGCATGAA 900
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        936 GACATCCTCATCCACCCGGAGCTCAACGAGGGCCTCATGAAGTGGGAGAATCGGCATGAA 995

Qy        901 GGCGTCTTCAAGTTCCTGCGCTCCGAGGCTGTGGCCCAACTATGGGGCCAAAAGAAAAAG 960
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        996 GGCGTCTTCAAGTTCCTGCGCTCCGAGGCTGTGGCCCAACTATGGGGCCAAAAGAAAAAG 1055

Qy        961 AACAGCAACATGACCTACGAGAAGCTGAGCCGGGCCATGAGGTACTACTACAAACGGGAG 1020
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1056 AACAGCAACATGACCTACGAGAAGCTGAGCCGGGCCATGAGGTACTACTACAAACGGGAG 1115

Qy       1021 ATCCTGGAACGGGTGGATGGCCGGCGACTCGTCTACAAGTTTGGCAAAAACTCAAGCGGC 1080
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1116 ATCCTGGAACGGGTGGATGGCCGGCGACTCGTCTACAAGTTTGGCAAAAACTCAAGCGGC 1175

Qy       1081 TGGAAGGAGGAAGAGGTTCTCCAGAGTCGGAACTGA 1116
              ||||||||||||||||||||||||||||||||||||
Db       1176 TGGAAGGAGGAAGAGGTTCTCCAGAGTCGGAACTGA 1211
```

RESULT 3
US-08-746-789A-1
; Sequence 1, Application US/08746789A
; Patent No. 5789200
; GENERAL INFORMATION:
; APPLICANT: Ismail Kola, Martin J. Tymms, Christine DeBouck
; TITLE OF INVENTION: A No. 5789200el Human ETS Family Member, ELF3
; NUMBER OF SEQUENCES: 4
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: SmithKline Beecham Corporation
; STREET: 709 Swedeland Road, P.O. Box 1539
; CITY: King of Prussia
; STATE: PA
; COUNTRY: USA
; ZIP: 19406-0939
; COMPUTER READABLE FORM:
; MEDIUM TYPE: DISKETTE, 3.5 INCH, 1.44 Mb STORAGE
; COMPUTER: IBM 486
; OPERATING SYSTEM: WINDOWS FOR WORKGROUPS
; SOFTWARE: MICROSOFT WORD
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/746,789A
; FILING DATE: No. 5789200ember 15, 1996
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER:
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: William T. Han
; REGISTRATION NUMBER: 34,344
; REFERENCE/DOCKET NUMBER: ATG 50024
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 610 270 5219
; TELEFAX: 610 270 4026
; INFORMATION FOR SEQ ID NO: 1:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 1920
; TYPE: Nucleic Acid
; STRANDEDNESS: Single
; TOPOLOGY: Linear
; ANTI-SENSE: No
US-08-746-789A-1

Query Match 99.4%; Score 1109.6; DB 1; Length 1920;
Best Local Similarity 99.6%; Pred. No. 6.7e-272;
Matches 1112; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

```
Qy          1 ATGGCTGCAACCTGTGAGATTAGCAACATTTTTAGCAACTACTTCAGTGCGATGTACAGC 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        115 ATGGCTGCAACCTGTGAGATTAGCAACATTTTTAGCAACTACTTCAGTGCGATGTACAGC 174

Qy         61 TCGGAGGACTCCACCCTGGCCTCTGTTCCCCCTGCTGCCACCTTTGGGGCCGATGACTTG 120
              ||||||||||||||| ||||||||||||||||||||||||||||||||||||||||||||
Db        175 TCGGAGGACTCCACCTTGGCCTCTGTTCCCCCTGCTGCCACCTTTGGGGCCGATGACTTG 234

Qy        121 GTACTGACCCTGAGCAACCCCCAGATGTCATTGGAGGGTACAGAGAAGGCCAGCTGGTTG 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        235 GTACTGACCCTGAGCAACCCCCAGATGTCATTGGAGGGTACAGAGAAGGCTAGCTGGTTG 294

Qy        181 GGGGAACAGCCCCAGTTCTGGTCGAAGACGCAGGTTCTGGACTGGATCAGCTACCAAGTG 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        295 GGGGAACAGCCCCAGTTCTGGTCGAAGACGCAGGTTCTGGACTGGATCAGCTACCAAGTG 354

Qy        241 GAGAAGAACAAGTACGACGCAAGCGCCATTGACTTCTCACGATGTGACATGGATGGCGCC 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||| |||||||
Db        355 GAGAAGAACAAGTACGACGCAAGCGCCATTGACTTCTCACGATGTGACATGGATGGGGCC 414

Qy        301 ACCCTCTGCAATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGCCTCTGGGGGACCAA 360
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        415 ACCCTCTGCAATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGCCTCTGGGGGACCAA 474

Qy        361 CTCCATGCCCAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATT 420
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        475 CTCCATGCCCAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATT 534

Qy        421 GAGCTGCTGGAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCCTTTGAC 480
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        535 GAGCTGCTGGAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCCTTTGAC 594

Qy        481 CAGGGCAGCCCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCAC 540
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        595 CAGGGCAGCCCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCAC 654

Qy        541 CCCGGCAGCTGTGGCGCAGGAGCCCCCTCCCCTGGCAGCTCTGACGTCTCCACCGCAGGG 600
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        655 CCCGGCAGCTGTGGCGCAGGAGCCCCCTCCCCTGGCAGCTCTGACGTCTCCACCGCAGGG 714

Qy        601 ACTGGTGCTTCTCGGAGCTCCCACTCCTCAGACTCCGGTGGAAGTGACGTGGACCTGGAT 660
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        715 ACTGGTGCTTCTCGGAGCTCCCACTCCTCAGACTCCGGTGGAAGTGACGTGGACCTGGAT 774

Qy        661 CCCACTGATGGCAAGCTCTTCCCCAGCGATGGTTTTCGTGACTGCAAGAAGGGGGATCCC 720
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        775 CCCACTGATGGCAAGCTCTTCCCCAGCGATGGTTTTCGTGACTGCAAGAAGGGGGATCCC 834

Qy        721 AAGCACGGGAAGCGGAAACGAGGCCGGCCCCGAAAGCTGAGCAAAGAGTACTGGGACTGT 780
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        835 AAGCACGGGAAGCGGAAACGAGGCCGGCCCCGAAAGCTGAGCAAAGAGTACTGGGACTGT 894

Qy        781 CTCGAGGGCAAGAAGAGCAAGCACGCGCCCAGAGGCACCCACCTGTGGGAGTTCATCCGG 840
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        895 CTCGAGGGCAAGAAGAGCAAGCACGCGCCCAGAGGCACCCACCTGTGGGAGTTCATCCGG 954

Qy        841 GACATCCTCATCCACCCGGAGCTCAACGAGGGCCTCATGAAGTGGGAGAATCGGCATGAA 900
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        955 GACATCCTCATCCACCCGGAGCTCAACGAGGGCCTCATGAAGTGGGAGAATCGGCATGAA 1014

Qy        901 GGCGTCTTCAAGTTCCTGCGCTCCGAGGCTGTGGCCCAACTATGGGGCCAAAAGAAAAAG 960
              ||||||||||||||||||||||||||||||||||||||||||||||||||| ||||||||||
Db       1015 GGCGTCTTCAAGTTCCTGCGCTCCGAGGCTGTGGCCCAACTATGGGGCCAAAAGAAAAAG 1074

Qy        961 AACAGCAACATGACCTACGAGAAGCTGAGCCGGGCCATGAGGTACTACTACAAACGGGAG 1020
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1075 AACAGCAACATGACCTACGAGAAGCTGAGCCGGGCCATGAGGTACTACTACAAACGGGAG 1134

Qy       1021 ATCCTGGAACGGGTGGATGGCCGGCGACTCGTCTACAAGTTTGGCAAAAACTCAAGCGGC 1080
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1135 ATCCTGGAACGGGTGGATGGCCGGCGACTCGTCTACAAGTTTGGCAAAAACTCAAGCGGC 1194

Qy       1081 TGGAAGGAGGAAGAGGTTCTCCAGAGTCGGAACTGA 1116
              ||||||||||||||||||||||||||||||||||||
Db       1195 TGGAAGGAGGAAGAGGTTCTCCAGAGTCGGAACTGA 1230
```

RESULT 4

```
US-09-389-681-282
; Sequence 282, Application US/09389681A
; Patent No. 6518237
; GENERAL INFORMATION:
;  APPLICANT: Yuqui, Jiang
;  APPLICANT: Dillon, Davin C.
;  APPLICANT: Mitcham, Jennifer L.
;  APPLICANT: Xu, Jiangchun
;  TITLE OF INVENTION: COMPOSITIONS FOR THE TREATMENT AND
;  TITLE OF INVENTION: DIAGNOSIS OF BREAST CANCER AND METHODS FOR THEIR USE
;  FILE REFERENCE: 210121.470C3
;  CURRENT APPLICATION NUMBER: US/09/389,681A
;  CURRENT FILING DATE: 1999-09-02
;  NUMBER OF SEQ ID NOS: 463
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 282
;   LENGTH: 502
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-389-681-282

  Query Match             44.7%;  Score 499.4;  DB 4;  Length 502;
  Best Local Similarity   99.8%;  Pred. No. 1.8e-117;
  Matches  500;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        549 CTGTGGCGCAGGAGCCCCCTCCCCTGGCAGCTCTGACGTCTCCACCGCAGGGACTGGTGC 608
              ||||||||||||||||||||||||| ||||||||||||||||||||||||||||||||||||
Db          2 CTGTGGCGCAGGAGCCCCCTCCCCCGGCAGCTCTGACGTCTCCACCGCAGGGACTGGTGC 61

Qy        609 TTCTCGGAGCTCCCACTCCTCAGACTCCGGTGGAAGTGACGTGGACCTGGATCCCACTGA 668
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         62 TTCTCGGAGCTCCCACTCCTCAGACTCCGGTGGAAGTGACGTGGACCTGGATCCCACTGA 121

Qy        669 TGGCAAGCTCTTCCCCAGCGATGGTTTTCGTGACTGCAAGAAGGGGGATCCCAAGCACGG 728
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        122 TGGCAAGCTCTTCCCCAGCGATGGTTTTCGTGACTGCAAGAAGGGGGATCCCAAGCACGG 181

Qy        729 GAAGCGGAAACGAGGCCGGCCCCGAAAGCTGAGCAAAGAGTACTGGGACTGTCTCGAGGG 788
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        182 GAAGCGGAAACGAGGCCGGCCCCGAAAGCTGAGCAAAGAGTACTGGGACTGTCTCGAGGG 241

Qy        789 CAAGAAGAGCAAGCACGCGCCCAGAGGCACCCACCTGTGGGAGTTCATCCGGGACATCCT 848
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        242 CAAGAAGAGCAAGCACGCGCCCAGAGGCACCCACCTGTGGGAGTTCATCCGGGACATCCT 301

Qy        849 CATCCACCCGGAGCTCAACGAGGGCCTCATGAAGTGGGAGAATCGGCATGAAGGCGTCTT 908
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        302 CATCCACCCGGAGCTCAACGAGGGCCTCATGAAGTGGGAGAATCGGCATGAAGGCGTCTT 361

Qy        909 CAAGTTCCTGCGCTCCGAGGCTGTGGCCCAACTATGGGGCCAAAAGAAAAAGAACAGCAA 968
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        362 CAAGTTCCTGCGCTCCGAGGCTGTGGCCCAACTATGGGGCCAAAAGAAAAAGAACAGCAA 421

Qy        969 CATGACCTACGAGAAGCTGAGCCGGGCCATGAGGTACTACTACAAACGGGAGATCCTGGA 1028
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        422 CATGACCTACGAGAAGCTGAGCCGGGCCATGAGGTACTACTACAAACGGGAGATCCTGGA 481

Qy       1029 ACGGGTGGATGGCCGGCGACT 1049
              |||||||||||||||||||||
Db        482 ACGGGTGGATGGCCGGCGACT 502


RESULT 5
US-09-620-405B-282
; Sequence 282, Application US/09620405B
; Patent No. 6528054
; GENERAL INFORMATION:
;  APPLICANT: Jiang, Yuqiu
;  APPLICANT:  Dillon, Davin C.
;  APPLICANT:  Mitcham, Jennifer L.
;  APPLICANT:  Xu, Jiangchun
;  APPLICANT:  Harlocker, Susan L.
;  APPLICANT:  Hepler, William T.
;  TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY AND
;  TITLE OF INVENTION:  DIAGNOSIS OF BREAST CANCER
;  FILE REFERENCE: 210121.470C8
;  CURRENT APPLICATION NUMBER: US/09/620,405B
;  CURRENT FILING DATE:  2000-07-20
;  NUMBER OF SEQ ID NOS: 495
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 282
;   LENGTH: 502
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-620-405B-282

  Query Match             44.7%;  Score 499.4;  DB 4;  Length 502;
  Best Local Similarity   99.8%;  Pred. No. 1.8e-117;
  Matches  500;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        549 CTGTGGCGCAGGAGCCCCCTCCCCTGGCAGCTCTGACGTCTCCACCGCAGGGACTGGTGC 608
              ||||||||||||||||||||||||| ||||||||||||||||||||||||||||||||||||
Db          2 CTGTGGCGCAGGAGCCCCCTCCCCCGGCAGCTCTGACGTCTCCACCGCAGGGACTGGTGC 61

Qy        609 TTCTCGGAGCTCCCACTCCTCAGACTCCGGTGGAAGTGACGTGGACCTGGATCCCACTGA 668
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         62 TTCTCGGAGCTCCCACTCCTCAGACTCCGGTGGAAGTGACGTGGACCTGGATCCCACTGA 121

Qy        669 TGGCAAGCTCTTCCCCAGCGATGGTTTTCGTGACTGCAAGAAGGGGGATCCCAAGCACGG 728
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        122 TGGCAAGCTCTTCCCCAGCGATGGTTTTCGTGACTGCAAGAAGGGGGATCCCAAGCACGG 181

Qy        729 GAAGCGGAAACGAGGCCGGCCCCGAAAGCTGAGCAAAGAGTACTGGGACTGTCTCGAGGG 788
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        182 GAAGCGGAAACGAGGCCGGCCCCGAAAGCTGAGCAAAGAGTACTGGGACTGTCTCGAGGG 241

Qy        789 CAAGAAGAGCAAGCACGCGCCCAGAGGCACCCACCTGTGGGAGTTCATCCGGGACATCCT 848
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        242 CAAGAAGAGCAAGCACGCGCCCAGAGGCACCCACCTGTGGGAGTTCATCCGGGACATCCT 301

Qy        849 CATCCACCCGGAGCTCAACGAGGGCCTCATGAAGTGGGAGAATCGGCATGAAGGCGTCTT 908
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        302 CATCCACCCGGAGCTCAACGAGGGCCTCATGAAGTGGGAGAATCGGCATGAAGGCGTCTT 361

Qy        909 CAAGTTCCTGCGCTCCGAGGCTGTGGCCCAACTATGGGGCCAAAAGAAAAAGAACAGCAA 968
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        362 CAAGTTCCTGCGCTCCGAGGCTGTGGCCCAACTATGGGGCCAAAAGAAAAAGAACAGCAA 421

Qy        969 CATGACCTACGAGAAGCTGAGCCGGGCCATGAGGTACTACTACAAACGGGAGATCCTGGA 1028
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        422 CATGACCTACGAGAAGCTGAGCCGGGCCATGAGGTACTACTACAAACGGGAGATCCTGGA 481

Qy       1029 ACGGGTGGATGGCCGGCGACT 1049
              |||||||||||||||||||||
Db        482 ACGGGTGGATGGCCGGCGACT 502


RESULT 6
US-09-339-338-282
; Sequence 282, Application US/09339338A
; Patent No. 6573368
; GENERAL INFORMATION:
;  APPLICANT: Yuqiu, Jiang
;  APPLICANT: Dillon, Davin C.
;  APPLICANT: Mitcham, Jennifer L.
;  APPLICANT: Xu, Jiangchun
;  TITLE OF INVENTION: COMPOSITIONS FOR THE TREATMENT AND
;  TITLE OF INVENTION: DIAGNOSIS OF BREAST CANCER AND METHODS FOR THEIR USE
;  FILE REFERENCE: 210121.470C2
;  CURRENT APPLICATION NUMBER: US/09/339,338A
;  CURRENT FILING DATE: 1999-06-23
;  NUMBER OF SEQ ID NOS: 315
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 282
;   LENGTH: 502
;   TYPE: DNA
```

```
;   ORGANISM: Homo sapiens
US-09-339-338-282

  Query Match             44.7%;  Score 499.4;  DB 4;  Length 502;
  Best Local Similarity   99.8%;  Pred. No. 1.8e-117;
  Matches  500;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        549 CTGTGGCGCAGGAGCCCCCTCCCCTGGCAGCTCTGACGTCTCCACCGCAGGGACTGGTGC 608
              ||||||||||||||||||||||| ||||||||||||||||||||||||||||||||||||
Db          2 CTGTGGCGCAGGAGCCCCCTCCCCCGGCAGCTCTGACGTCTCCACCGCAGGGACTGGTGC 61

Qy        609 TTCTCGGAGCTCCCACTCCTCAGACTCCGGTGGAAGTGACGTGGACCTGGATCCCACTGA 668
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         62 TTCTCGGAGCTCCCACTCCTCAGACTCCGGTGGAAGTGACGTGGACCTGGATCCCACTGA 121

Qy        669 TGGCAAGCTCTTCCCCAGCGATGGTTTTCGTGACTGCAAGAAGGGGGATCCCAAGCACGG 728
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        122 TGGCAAGCTCTTCCCCAGCGATGGTTTTCGTGACTGCAAGAAGGGGGATCCCAAGCACGG 181

Qy        729 GAAGCGGAAACGAGGCCGGCCCCGAAAGCTGAGCAAAGAGTACTGGGACTGTCTCGAGGG 788
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        182 GAAGCGGAAACGAGGCCGGCCCCGAAAGCTGAGCAAAGAGTACTGGGACTGTCTCGAGGG 241

Qy        789 CAAGAAGAGCAAGCACGCGCCCAGAGGCACCCACCTGTGGGAGTTCATCCGGGACATCCT 848
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        242 CAAGAAGAGCAAGCACGCGCCCAGAGGCACCCACCTGTGGGAGTTCATCCGGGACATCCT 301

Qy        849 CATCCACCCGGAGCTCAACGAGGGCCTCATGAAGTGGGAGAATCGGCATGAAGGCGTCTT 908
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        302 CATCCACCCGGAGCTCAACGAGGGCCTCATGAAGTGGGAGAATCGGCATGAAGGCGTCTT 361

Qy        909 CAAGTTCCTGCGCTCCGAGGCTGTGGCCCAACTATGGGGCCAAAAGAAAAAGAACAGCAA 968
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        362 CAAGTTCCTGCGCTCCGAGGCTGTGGCCCAACTATGGGGCCAAAAGAAAAAGAACAGCAA 421

Qy        969 CATGACCTACGAGAAGCTGAGCCGGGCCATGAGGTACTACTACAAACGGGAGATCCTGGA 1028
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        422 CATGACCTACGAGAAGCTGAGCCGGGCCATGAGGTACTACTACAAACGGGAGATCCTGGA 481

Qy       1029 ACGGGTGGATGGCCGGCGACT 1049
              |||||||||||||||||||||
Db        482 ACGGGTGGATGGCCGGCGACT 502


RESULT 7
US-09-433-826B-282
; Sequence 282, Application US/09433826B
; Patent No. 6579973
; GENERAL INFORMATION:
;  APPLICANT:  Jiang, Yuqui
;  APPLICANT:  Dillon, Davin C.
;  APPLICANT:  Mitcham, Jennifer L.
;  APPLICANT:  Xu, Jiangchun
;  APPLICANT:  Harlocker, Susan L.
;  TITLE OF INVENTION:  COMPOSITIONS FOR THE TREATMENT AND
;  TITLE OF INVENTION:  DIAGNOSIS OF BREAST CANCER AND METHODS FOR THEIR USE
;  FILE REFERENCE:  210121.470C4
;  CURRENT APPLICATION NUMBER: US/09/433,826B
;  CURRENT FILING DATE:  1999-11-03
;  NUMBER OF SEQ ID NOS:  474
;  SOFTWARE:  FastSEQ for Windows Version 3.0
; SEQ ID NO 282
;   LENGTH: 502
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-433-826B-282

  Query Match             44.7%;  Score 499.4;  DB 4;  Length 502;
  Best Local Similarity   99.8%;  Pred. No. 1.8e-117;
  Matches  500;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        549 CTGTGGCGCAGGAGCCCCCTCCCCTGGCAGCTCTGACGTCTCCACCGCAGGGACTGGTGC 608
              ||||||||||||||||||||||| ||||||||||||||||||||||||||||||||||||
Db          2 CTGTGGCGCAGGAGCCCCCTCCCCCGGCAGCTCTGACGTCTCCACCGCAGGGACTGGTGC 61

Qy        609 TTCTCGGAGCTCCCACTCCTCAGACTCCGGTGGAAGTGACGTGGACCTGGATCCCACTGA 668
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         62 TTCTCGGAGCTCCCACTCCTCAGACTCCGGTGGAAGTGACGTGGACCTGGATCCCACTGA 121

Qy        669 TGGCAAGCTCTTCCCCAGCGATGGTTTTCGTGACTGCAAGAAGGGGGATCCCAAGCACGG 728
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        122 TGGCAAGCTCTTCCCCAGCGATGGTTTTCGTGACTGCAAGAAGGGGGATCCCAAGCACGG 181

Qy        729 GAAGCGGAAACGAGGCCGGCCCCGAAAGCTGAGCAAAGAGTACTGGGACTGTCTCGAGGG 788
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        182 GAAGCGGAAACGAGGCCGGCCCCGAAAGCTGAGCAAAGAGTACTGGGACTGTCTCGAGGG 241

Qy        789 CAAGAAGAGCAAGCACGCGCCCAGAGGCACCCACCTGTGGGAGTTCATCCGGGACATCCT 848
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        242 CAAGAAGAGCAAGCACGCGCCCAGAGGCACCCACCTGTGGGAGTTCATCCGGGACATCCT 301

Qy        849 CATCCACCCGGAGCTCAACGAGGGCCTCATGAAGTGGGAGAATCGGCATGAAGGCGTCTT 908
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        302 CATCCACCCGGAGCTCAACGAGGGCCTCATGAAGTGGGAGAATCGGCATGAAGGCGTCTT 361

Qy        909 CAAGTTCCTGCGCTCCGAGGCTGTGGCCCAACTATGGGGCCAAAAGAAAAAGAACAGCAA 968
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        362 CAAGTTCCTGCGCTCCGAGGCTGTGGCCCAACTATGGGGCCAAAAGAAAAAGAACAGCAA 421

Qy        969 CATGACCTACGAGAAGCTGAGCCGGGCCATGAGGTACTACTACAAACGGGAGATCCTGGA 1028
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        422 CATGACCTACGAGAAGCTGAGCCGGGCCATGAGGTACTACTACAAACGGGAGATCCTGGA 481

Qy       1029 ACGGGTGGATGGCCGGCGACT 1049
              |||||||||||||||||||||
Db        482 ACGGGTGGATGGCCGGCGACT 502


RESULT 8
US-09-604-287A-282
; Sequence 282, Application US/09604287A
; Patent No. 6586572
; GENERAL INFORMATION:
;  APPLICANT: Jiang, Yuqiu
;  APPLICANT:  Dillon, Davin C.
;  APPLICANT:  Mitcham, Jennifer L.
;  APPLICANT:  Xu, Jiangchun
;  APPLICANT:  Harlocker, Susan L.
;  APPLICANT:  Hepler, William T.
;  TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY AND
;  TITLE OF INVENTION:  DIAGNOSIS OF BREAST CANCER
;  FILE REFERENCE: 210121.470C7
;  CURRENT APPLICATION NUMBER: US/09/604,287A
;  CURRENT FILING DATE:  2000-06-22
;  NUMBER OF SEQ ID NOS: 489
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 282
;   LENGTH: 502
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-604-287A-282

  Query Match             44.7%;  Score 499.4;  DB 4;  Length 502;
  Best Local Similarity   99.8%;  Pred. No. 1.8e-117;
  Matches  500;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        549 CTGTGGCGCAGGAGCCCCCTCCCCTGGCAGCTCTGACGTCTCCACCGCAGGGACTGGTGC 608
              ||||||||||||||||||||||| ||||||||||||||||||||||||||||||||||||
Db          2 CTGTGGCGCAGGAGCCCCCTCCCCCGGCAGCTCTGACGTCTCCACCGCAGGGACTGGTGC 61

Qy        609 TTCTCGGAGCTCCCACTCCTCAGACTCCGGTGGAAGTGACGTGGACCTGGATCCCACTGA 668
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         62 TTCTCGGAGCTCCCACTCCTCAGACTCCGGTGGAAGTGACGTGGACCTGGATCCCACTGA 121

Qy        669 TGGCAAGCTCTTCCCCAGCGATGGTTTTCGTGACTGCAAGAAGGGGGATCCCAAGCACGG 728
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        122 TGGCAAGCTCTTCCCCAGCGATGGTTTTCGTGACTGCAAGAAGGGGGATCCCAAGCACGG 181

Qy        729 GAAGCGGAAACGAGGCCGGCCCCGAAAGCTGAGCAAAGAGTACTGGGACTGTCTCGAGGG 788
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        182 GAAGCGGAAACGAGGCCGGCCCCGAAAGCTGAGCAAAGAGTACTGGGACTGTCTCGAGGG 241

Qy        789 CAAGAAGAGCAAGCACGCGCCCAGAGGCACCCACCTGTGGGAGTTCATCCGGGACATCCT 848
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        242 CAAGAAGAGCAAGCACGCGCCCAGAGGCACCCACCTGTGGGAGTTCATCCGGGACATCCT 301

Qy        849 CATCCACCCGGAGCTCAACGAGGGCCTCATGAAGTGGGAGAATCGGCATGAAGGCGTCTT 908
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        302 CATCCACCCGGAGCTCAACGAGGGCCTCATGAAGTGGGAGAATCGGCATGAAGGCGTCTT 361

Qy        909 CAAGTTCCTGCGCTCCGAGGCTGTGGCCCAACTATGGGGCCAAAAGAAAAAGAACAGCAA 968
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        362 CAAGTTCCTGCGCTCCGAGGCTGTGGCCCAACTATGGGGCCAAAAGAAAAAGAACAGCAA 421

Qy        969 CATGACCTACGAGAAGCTGAGCCGGGCCATGAGGTACTACTACAAACGGGAGATCCTGGA 1028
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        422 CATGACCTACGAGAAGCTGAGCCGGGCCATGAGGTACTACTACAAACGGGAGATCCTGGA 481

Qy       1029 ACGGGTGGATGGCCGGCGACT 1049
              |||||||||||||||||||||
Db        482 ACGGGTGGATGGCCGGCGACT 502


  Query Match             44.7%;  Score 499.4;  DB 4;  Length 502;
  Best Local Similarity   99.8%;  Pred. No. 1.8e-117;
  Matches  500;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        549 CTGTGGCGCAGGAGCCCCCTCCCCTGGCAGCTCTGACGTCTCCACCGCAGGGACTGGTGC 608
              ||||||||||||||||||||||| ||||||||||||||||||||||||||||||||||||
Db          2 CTGTGGCGCAGGAGCCCCCTCCCCCGGCAGCTCTGACGTCTCCACCGCAGGGACTGGTGC 61

Qy        609 TTCTCGGAGCTCCCACTCCTCAGACTCCGGTGGAAGTGACGTGGACCTGGATCCCACTGA 668
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         62 TTCTCGGAGCTCCCACTCCTCAGACTCCGGTGGAAGTGACGTGGACCTGGATCCCACTGA 121

Qy        669 TGGCAAGCTCTTCCCCAGCGATGGTTTTCGTGACTGCAAGAAGGGGGATCCCAAGCACGG 728
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
```

```
Db        122 TGGCAAGCTCTTCCCCAGCGATGGTTTTCGTGACTGCAAGAAGGGGGATCCCAAGCACGG 181

Qy        729 GAAGCGGAAACGAGGCCGGCCCCGAAAGCTGAGCAAAGAGTACTGGGACTGTCTCGAGGG 788
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        182 GAAGCGGAAACGAGGCCGGCCCCGAAAGCTGAGCAAAGAGTACTGGGACTGTCTCGAGGG 241

Qy        789 CAAGAAGAGCAAGCACGCGCCCAGAGGCACCCACCTGTGGGAGTTCATCCGGGACATCCT 848
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        242 CAAGAAGAGCAAGCACGCGCCCAGAGGCACCCACCTGTGGGAGTTCATCCGGGACATCCT 301

Qy        849 CATCCACCCGGAGCTCAACGAGGGCCTCATGAAGTGGGAGAATCGGCATGAAGGCGTCTT 908
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        302 CATCCACCCGGAGCTCAACGAGGGCCTCATGAAGTGGGAGAATCGGCATGAAGGCGTCTT 361

Qy        909 CAAGTTCCTGCGCTCCGAGGCTGTGGCCCAACTATGGGGCCAAAAGAAAAAGAACAGCAA 968
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        362 CAAGTTCCTGCGCTCCGAGGCTGTGGCCCAACTATGGGGCCAAAAGAAAAAGAACAGCAA 421

Qy        969 CATGACCTACGAGAAGCTGAGCCGGGCCATGAGGTACTACTACAAACGGGAGATCCTGGA 1028
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        422 CATGACCTACGAGAAGCTGAGCCGGGCCATGAGGTACTACTACAAACGGGAGATCCTGGA 481

Qy       1029 ACGGGTGGATGGCCGGCGACT 1049
              |||||||||||||||||||||
Db        482 ACGGGTGGATGGCCGGCGACT 502
```

RESULT 9
US-09-020-956-44/c
; Sequence 44, Application US/09020956
; Patent No. 6261562
; GENERAL INFORMATION:
; APPLICANT: Xu, Jiangchun
; APPLICANT: Dillin, Davin C.
; TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY OF PROSTATE CANCER AND METHODS FO
; NUMBER OF SEQUENCES: 178
; CORRESPONDENCE ADDRESS:
; .ADDRESSEE: SEED and BERRY LLP
; STREET: 6300 Columbia Center, 701 Fifth Avenue
; CITY: Seattle
; STATE: WA
; COUNTRY: USA
; ZIP: 98104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/020,956
; FILING DATE: 09-FEB-1998
; CLASSIFICATION:
; ATTORNEY/AGENT INFORMATION:
; NAME: Maki, David J.
; REGISTRATION NUMBER: 31,392
; REFERENCE/DOCKET NUMBER: 210121.427C2
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (206) 622-4900
; TELEFAX: (206) 682-6031
; INFORMATION FOR SEQ ID NO: 44:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 852 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: cDNA
; ORIGINAL SOURCE:
; ORGANISM: Homo sapiens
US-09-020-956-44

Query Match 15.6%; Score 173.8; DB 3; Length 852;
Best Local Similarity 69.7%; Pred. No. 6.5e-35;
Matches 235; Conservative 0; Mismatches 102; Indels 0; Gaps 0;

```
Qy        758 TGAGCAAAGAGTACTGGGACTGTCTCGAGGGCAAGAAGAGCAAGCACGCGCCCAGAGGCA 817
              ||| || ||| | | | || || | | | |||||| || ||||| |
Db        450 TGAAAAAGGAGCAAGACCCCCCTGCCAAGTGCCACACCAAAAAGCACAACCCGAGAGGGA 391

Qy        818 CCCACCTGTGGGAGTTCATCCGGGACATCCTCATCCACCCGGAGCTCAACGAGGGCCTCA 877
              | ||| | ||||| |||||||| ||||||||| | |||| || ||| || | |
Db        390 CTCACTTATGGGAATTCATCCGCGACATCCTCTTGAACCCAGACAAGAACCCAGGATTAA 331

Qy        878 TGAAGTGGGAGAATCGGCATGAAGGCGTCTTCAAGTTCCTGCGCTCCGAGGCTGTGGCCC 937
              | || ||||| | ||  ||| |||||||||| |||| ||  || |||||| |||||
Db        330 TAAAATGGGAAGACCGATCTGAGGGCGTCTTCAGGTTCTTGAAATCAGAGGCAGTGGCTC 271

Qy        938 AACTATGGGGCCAAAAGAAAAAGAACAGCAACATGACCTACGAGAAGCTGAGCCGGGCCA 997
              | |||||||| |||||| || ||||||| |||||||| || ||||| ||||| || | |
Db        270 AGCTATGGGGTAAAAAGAAGAACAACAGCAGCATGACCTATGAAAAGCTCAGCCGAGCTA 211

Qy        998 TGAGGTACTACTACAAACGGGAGATCCTGGAACGGGTGGATGGCCGGCGACTCGTCTACA 1057
              |||| || |||||||| | || || ||||| || |||||||| || |||| || || |
Db        210 TGAGATATTACTACAAAAGAGAAATTCTGGAGCGTGTGGATGGACGAAGACTGGTATATA 151

Qy       1058 AGTTTGGCAAAAACTCAAGCGGCTGGAAGGAGGAAGA 1094
              | ||||| || ||  |  | || |||| || | ||
Db        150 AATTTGGGAAGAATGCCCGAGGATGGAGAGAAAATGA 114
```

RESULT 10
US-09-030-607-44/c
; Sequence 44, Application US/09030607
; Patent No. 6262245
; GENERAL INFORMATION:
; APPLICANT: Xu, Jiangchun
; APPLICANT: Dillon, Davin C.
; TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY OF PROSTATE CANCER AND METHODS FO
; NUMBER OF SEQUENCES: 224
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: SEED and BERRY LLP
; STREET: 6300 Columbia Center, 701 Fifth Avenue
; CITY: Seattle
; STATE: WA
; COUNTRY: USA
; ZIP: 98104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/030,607
; FILING DATE: 25-FEB-1998
; CLASSIFICATION:
; ATTORNEY/AGENT INFORMATION:
; NAME: Maki, David J.
; REGISTRATION NUMBER: 31,392
; REFERENCE/DOCKET NUMBER: 210121.427C3
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (206) 622-4900
; TELEFAX: (206) 682-6031
; INFORMATION FOR SEQ ID NO: 44:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 852 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: cDNA
; ORIGINAL SOURCE:
; ORGANISM: Homo sapiens
US-09-030-607-44

Query Match 15.6%; Score 173.8; DB 3; Length 852;
Best Local Similarity 69.7%; Pred. No. 6.5e-35;
Matches 235; Conservative 0; Mismatches 102; Indels 0; Gaps 0;

```
Qy        758 TGAGCAAAGAGTACTGGGACTGTCTCGAGGGCAAGAAGAGCAAGCACGCGCCCAGAGGCA 817
              ||| || ||| |     |  |  | || || | |  |  |||||   || ||||| |
Db        450 TGAAAAAGGAGCAAGACCCCCCTGCCAAGTGCCACACCAAAAAGCACAACCCGAGAGGGA 391

Qy        818 CCCACCTGTGGGAGTTCATCCGGGACATCCTCATCCACCCGGAGCTCAACGAGGGCCTCA 877
              | ||| | ||||| |||||||| ||||||||| |  |||| ||    |||   ||  | |
Db        390 CTCACTTATGGGAATTCATCCGCGACATCCTCTTGAACCCAGACAAGAACCCAGGATTAA 331

Qy        878 TGAAGTGGGAGAATCGGCATGAAGGCGTCTTCAAGTTCCTGCGCTCCGAGGCTGTGGCCC 937
              | || |||||  | ||   ||| |||||||||| |||| ||   || ||||| ||||| |
Db        330 TAAAATGGGAAGACCGATCTGAGGGCGTCTTCAGGTTCTTGAAATCAGAGGCAGTGGCTC 271

Qy        938 AACTATGGGGCCAAAAGAAAAAGAACAGCAACATGACCTACGAGAAGCTGAGCCGGGCCA 997
              | ||||||||  |||||| || ||||||| |||||||| || ||||| ||||| || |
Db        270 AGCTATGGGGTAAAAAGAAGAACAACAGCAGCATGACCTATGAAAAGCTCAGCCGAGCTA 211

Qy        998 TGAGGTACTACTACAAACGGGAGATCCTGGAACGGGTGGATGGCCGGCGACTCGTCTACA 1057
              |||| || |||||||||| | || || ||||| || |||||||| ||  |||| || || |
Db        210 TGAGATATTACTACAAAAGAGAAATTCTGGAGCGTGTGGATGGACGAAGACTGGTATATA 151

Qy       1058 AGTTTGGCAAAAACTCAAGCGGCTGGAAGGAGGAAGA 1094
              | ||||| || ||  |  | || ||||  ||  | ||
Db        150 AATTTGGGAAGAATGCCCGAGGATGGAGAGAAAATGA 114
```

RESULT 11
US-09-439-313-44/c
; Sequence 44, Application US/09439313
; Patent No. 6329505
; GENERAL INFORMATION:
; APPLICANT: Xu, Jiangchun
; APPLICANT: Dillon, Davin C.
; APPLICANT: Mitcham, Jennifer L.
; APPLICANT: Harlocker, Susan Louise
; APPLICANT: Jiang Yuqui
; APPLICANT: Reed, Steven G.
; APPLICANT: Kalos, Michael
; APPLICANT: Fanger, Gary
; APPLICANT: Retter, Mark
; APPLICANT: Solk, John
; APPLICANT: Day, Craig
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THERAPY AND
; TITLE OF INVENTION: DIAGNOSIS OF PROSTATE CANCER
; FILE REFERENCE: 210121.427C9
; CURRENT APPLICATION NUMBER: US/09/439,313
; CURRENT FILING DATE: 1999-11-12
; NUMBER OF SEQ ID NOS: 575
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 44
; LENGTH: 852
; TYPE: DNA
; ORGANISM: Homo sapien
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (1)...(852)
; OTHER INFORMATION: n = A,T,C or G
US-09-439-313-44

Query Match 15.6%; Score 173.8; DB 4; Length 852;
Best Local Similarity 69.7%; Pred. No. 6.5e-35;
Matches 235; Conservative 0; Mismatches 102; Indels 0; Gaps 0;

```
Qy        758 TGAGCAAAGAGTACTGGGACTGTCTCGAGGGCAAGAAGAGCAAGCACGCGCCCAGAGGCA 817
              |||  || ||| |     |  |  | || || | |  |  |||||   || ||||| |
Db        450 TGAAAAAGGAGCAAGACCCCCCTGCCAAGTGCCACACCAAAAAGCACAACCCGAGAGGGA 391

Qy        818 CCCACCTGTGGGAGTTCATCCGGGACATCCTCATCCACCCGGAGCTCAACGAGGGCCTCA 877
              | ||| | ||||| |||||||| ||||||||| |  |||| ||    |||   ||  | |
Db        390 CTCACTTATGGGAATTCATCCGCGACATCCTCTTGAACCCAGACAAGAACCCAGGATTAA 331

Qy        878 TGAAGTGGGAGAATCGGCATGAAGGCGTCTTCAAGTTCCTGCGCTCCGAGGCTGTGGCCC 937
              | || |||||  | ||   ||| |||||||||| |||| ||   || ||||| ||||| |
Db        330 TAAAATGGGAAGACCGATCTGAGGGCGTCTTCAGGTTCTTGAAATCAGAGGCAGTGGCTC 271
```

```
Qy        938 AACTATGGGGCCAAAAGAAAAAGAACAGCAACATGACCTACGAGAAGCTGAGCCGGGCCA 997
              | ||||||||  |||||| || ||||||| |||||||| || ||||| ||||| || |
Db        270 AGCTATGGGGTAAAAAGAAGAACAACAGCAGCATGACCTATGAAAAGCTCAGCCGAGCTA 211

Qy        998 TGAGGTACTACTACAAACGGGAGATCCTGGAACGGGTGGATGGCCGGCGACTCGTCTACA 1057
              |||| || |||||||||| | || || ||||| || |||||||| ||  |||| || || |
Db        210 TGAGATATTACTACAAAAGAGAAATTCTGGAGCGTGTGGATGGACGAAGACTGGTATATA 151

Qy       1058 AGTTTGGCAAAAACTCAAGCGGCTGGAAGGAGGAAGA 1094
              | ||||| || ||  |  | || ||||  ||  | ||
Db        150 AATTTGGGAAGAATGCCCGAGGATGGAGAGAAAATGA 114
```

RESULT 12
US-09-352-616A-44/c
; Sequence 44, Application US/09352616A
; Patent No. 6395278
; GENERAL INFORMATION:
; APPLICANT: Dillon, Davin C.
; APPLICANT: Harlocker, Susan Louise
; APPLICANT: Jiang, Yuqui
; APPLICANT: Xu, Jiangchun
; APPLICANT: Mitcham, Jennifer Lynn
; TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY AND DIAGNOSIS
; TITLE OF INVENTION: OF PROSTATE CANCER AND METHODS FOR THEIR USE
; FILE REFERENCE: 210121.427C8
; CURRENT APPLICATION NUMBER: US/09/352,616A
; CURRENT FILING DATE: 1999-07-13
; NUMBER OF SEQ ID NOS: 472
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 44
; LENGTH: 852
; TYPE: DNA
; ORGANISM: Homo sapien
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (1)...(852)
; OTHER INFORMATION: n = A,T,C or G
US-09-352-616A-44

Query Match 15.6%; Score 173.8; DB 4; Length 852;
Best Local Similarity 69.7%; Pred. No. 6.5e-35;
Matches 235; Conservative 0; Mismatches 102; Indels 0; Gaps 0;

```
Qy        758 TGAGCAAAGAGTACTGGGACTGTCTCGAGGGCAAGAAGAGCAAGCACGCGCCCAGAGGCA 817
              |||  || ||| |     |  |  | || || | |  |  |||||   || ||||| |
Db        450 TGAAAAAGGAGCAAGACCCCCCTGCCAAGTGCCACACCAAAAAGCACAACCCGAGAGGGA 391

Qy        818 CCCACCTGTGGGAGTTCATCCGGGACATCCTCATCCACCCGGAGCTCAACGAGGGCCTCA 877
              | ||| | ||||| |||||||| ||||||||| |  |||| ||    |||   ||  | |
Db        390 CTCACTTATGGGAATTCATCCGCGACATCCTCTTGAACCCAGACAAGAACCCAGGATTAA 331

Qy        878 TGAAGTGGGAGAATCGGCATGAAGGCGTCTTCAAGTTCCTGCGCTCCGAGGCTGTGGCCC 937
              | || |||||  | ||   ||| |||||||||| |||| ||   || ||||| ||||| |
Db        330 TAAAATGGGAAGACCGATCTGAGGGCGTCTTCAGGTTCTTGAAATCAGAGGCAGTGGCTC 271
```

```
Qy        938 AACTATGGGGCCAAAAGAAAAAGAACAGCAACATGACCTACGAGAAGCTGAGCCGGGCCA 997
              | ||||||||  |||||| || ||||||| |||||||| || ||||| ||||| || |
Db        270 AGCTATGGGGTAAAAAGAAGAACAACAGCAGCATGACCTATGAAAAGCTCAGCCGAGCTA 211

Qy        998 TGAGGTACTACTACAAACGGGAGATCCTGGAACGGGTGGATGGCCGGCGACTCGTCTACA 1057
              |||| || |||||||||| | || || ||||| || |||||||| ||  |||| || || |
Db        210 TGAGATATTACTACAAAAGAGAAATTCTGGAGCGTGTGGATGGACGAAGACTGGTATATA 151

Qy       1058 AGTTTGGCAAAAACTCAAGCGGCTGGAAGGAGGAAGA 1094
              | ||||| || ||  |  | || ||||  ||  | ||
Db        150 AATTTGGGAAGAATGCCCGAGGATGGAGAGAAAATGA 114
```

RESULT 13
US-09-232-149A-44/c
; Sequence 44, Application US/09232149A

```
; Patent No. 6465611
; GENERAL INFORMATION:
;  APPLICANT: Xu, Jiangchun
;  APPLICANT:  Dillon, Davin C.
;  APPLICANT:  Mitcham, Jennifer Lynn
;  TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY OF PROSTATE
;  TITLE OF INVENTION:  CANCER AND METHODS FOR THEIR USE
;  FILE REFERENCE: 210121.427C6
;  CURRENT APPLICATION NUMBER: US/09/232,149A
;  CURRENT FILING DATE:  1999-01-15
;  NUMBER OF SEQ ID NOS: 338
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 44
;   LENGTH: 852
;   TYPE: DNA
;   ORGANISM: Homo sapien
;   FEATURE:
;   NAME/KEY: misc_feature
;   LOCATION: (1)...(852)
;   OTHER INFORMATION: n = A,T,C or G
US-09-232-149A-44

  Query Match             15.6%;  Score 173.8;  DB 4;  Length 852;
  Best Local Similarity   69.7%;  Pred. No. 6.5e-35;
  Matches  235;  Conservative    0;  Mismatches  102;  Indels    0;  Gaps    0;

Qy        758 TGAGCAAAGAGTACTGGGACTGTCTCGAGGGCAAGAAGAGCAAGCACGCGCCCAGAGGCA 817
              ||| || ||| |     | | | || || | |  | |||||   || ||||| |
Db        450 TGAAAAAGGAGCAAGACCCCCCTGCCAAGTGCCACACCAAAAAGCACAACCCGAGAGGGA 391

Qy        818 CCCACCTGTGGGAGTTCATCCGGGACATCCTCATCCACCCGGAGCTCAACGAGGGCCTCA 877
              | ||| | ||||| |||||||| ||||||||| | |||| ||     ||   || | |
Db        390 CTCACTTATGGGAATTCATCCGCGACATCCTCTTGAACCCAGACAAGAACCCAGGATTAA 331

Qy        878 TGAAGTGGGAGAATCGGCATGAAGGCGTCTTCAAGTTCCTGCGCTCCGAGGCTGTGGCCC 937
              | || |||||  | ||   ||| |||||||||| |||| ||   || ||||| ||||| |
Db        330 TAAAATGGGAAGACCGATCTGAGGGCGTCTTCAGGTTCTTGAAATCAGAGGCAGTGGCTC 271

Qy        938 AACTATGGGGCCAAAAGAAAAAGAACAGCAACATGACCTACGAGAAGCTGAGCCGGGCCA 997
              | ||||||||  ||||||| || ||||||| |||||||| || ||||| |||| || |
Db        270 AGCTATGGGGTAAAAAGAAGAACAACAGCAGCATGACCTATGAAAAGCTCAGCCGAGCTA 211

Qy        998 TGAGGTACTACTACAAACGGGAGATCCTGGAACGGGTGGATGGCCGGCGACTCGTCTACA 1057
              |||| || ||||||||  | || || ||||| || ||||||| ||  |||| || || |
Db        210 TGAGATATTACTACAAAAGAGAAATTCTGGAGCGTGTGGATGGACGAAGACTGGTATATA 151

Qy       1058 AGTTTGGCAAAAACTCAAGCGGCTGGAAGGAGGAAGA 1094
              | ||||| || ||  |  | || ||||  ||  | ||
Db        150 AATTTGGGAAGAATGCCCGAGGATGGAGAGAAAATGA 114


RESULT 14
US-09-009-913-2
; Sequence 2, Application US/09009913
; Patent No. 6087485
;  GENERAL INFORMATION:
;    APPLICANT:  AxyS Pharmaceuticals, Inc.
;    TITLE OF INVENTION:  Asthma Related Genes
;    NUMBER OF SEQUENCES:  339
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Bozicevic & Reed, LLP
;      STREET:  285 Hamilton Ave, Suite 200
;      CITY:  Palo Alto
;      STATE:  CA
;      COUNTRY:  USA
;      ZIP:  94301
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Diskette
;      COMPUTER:  IBM Compatible
;      OPERATING SYSTEM:  DOS
;      SOFTWARE:  FastSEQ for Windows Version 2.0
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/009,913
;      FILING DATE:  21-JAN-1998
;      CLASSIFICATION:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:
;      FILING DATE:  .
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Sherwood, Pamela J
;      REGISTRATION NUMBER:  36,677
;      REFERENCE/DOCKET NUMBER:  SEQ-4P
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  650-327-3231
;      TELEFAX:  650-327-3231
;      TELEX:
;  INFORMATION FOR SEQ ID NO:  2:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  5427 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  double
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  cDNA
US-09-009-913-2

  Query Match             15.6%;  Score 173.8;  DB 3;  Length 5427;
  Best Local Similarity   69.7%;  Pred. No. 1.1e-34;
  Matches  235;  Conservative    0;  Mismatches  102;  Indels    0;  Gaps    0;

Qy        758 TGAGCAAAGAGTACTGGGACTGTCTCGAGGGCAAGAAGAGCAAGCACGCGCCCAGAGGCA 817
              |||  || ||| |     | | | || || | |  | ||||||   || ||||| |
Db        709 TGAAAAAGGAGCAAGACCCCCCTGCCAAGTGCCACACCAAAAAGCACAACCCGAGAGGGA 768

Qy        818 CCCACCTGTGGGAGTTCATCCGGGACATCCTCATCCACCCGGAGCTCAACGAGGGCCTCA 877
              | ||| | ||||| |||||||| ||||||||| | |||| ||     ||   || | |
Db        769 CTCACTTATGGGAATTCATCCGCGACATCCTCTTGAACCCAGACAAGAACCCAGGATTAA 828

Qy        878 TGAAGTGGGAGAATCGGCATGAAGGCGTCTTCAAGTTCCTGCGCTCCGAGGCTGTGGCCC 937
              | || |||||  | ||   ||| |||||||||| |||| ||   || ||||| ||||| |
Db        829 TAAAATGGGAAGACCGATCTGAGGGCGTCTTCAGGTTCTTGAAATCAGAGGCAGTGGCTC 888

Qy        938 AACTATGGGGCCAAAAGAAAAAGAACAGCAACATGACCTACGAGAAGCTGAGCCGGGCCA 997
              | ||||||||  ||||||| || ||||||| |||||||| || ||||| |||| || |
Db        889 AGCTATGGGGTAAAAAGAAGAACAACAGCAGCATGACCTATGAAAAGCTCAGCCGAGCTA 948

Qy        998 TGAGGTACTACTACAAACGGGAGATCCTGGAACGGGTGGATGGCCGGCGACTCGTCTACA 1057
              |||| || ||||||||  | || || ||||| || ||||||| ||  |||| || || |
Db        949 TGAGATATTACTACAAAAGAGAAATACTGGAGCGTGTGGATGGACGAAGACTGGTATATA 1008

Qy       1058 AGTTTGGCAAAAACTCAAGCGGCTGGAAGGAGGAAGA 1094
              | ||||| || ||  |  | || ||||  ||  | ||
Db       1009 AATTTGGGAAGAATGCCCGAGGATGGAGAGAAAATGA 1045


RESULT 15
US-09-009-913-3
; Sequence 3, Application US/09009913
; Patent No. 6087485
;  GENERAL INFORMATION:
;    APPLICANT:  AxyS Pharmaceuticals, Inc.
;    TITLE OF INVENTION:  Asthma Related Genes
;    NUMBER OF SEQUENCES:  339
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Bozicevic & Reed, LLP
;      STREET:  285 Hamilton Ave, Suite 200
;      CITY:  Palo Alto
;      STATE:  CA
;      COUNTRY:  USA
;      ZIP:  94301
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Diskette
;      COMPUTER:  IBM Compatible
;      OPERATING SYSTEM:  DOS
;      SOFTWARE:  FastSEQ for Windows Version 2.0
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/009,913
```

```
;       FILING DATE:  21-JAN-1998
;       CLASSIFICATION:
;     PRIOR APPLICATION DATA:
;       APPLICATION NUMBER:
;       FILING DATE:
;     ATTORNEY/AGENT INFORMATION:
;       NAME:  Sherwood, Pamela J
;       REGISTRATION NUMBER:  36,677
;       REFERENCE/DOCKET NUMBER:  SEQ-4P
;     TELECOMMUNICATION INFORMATION:
;       TELEPHONE:  650-327-3231
;       TELEFAX:  650-327-3231
;       TELEX:
;  INFORMATION FOR SEQ ID NO:  3:
;     SEQUENCE CHARACTERISTICS:
;       LENGTH:  5510 base pairs
;       TYPE:  nucleic acid
;       STRANDEDNESS:  double
;       TOPOLOGY:  linear
;     MOLECULE TYPE:  cDNA
US-09-009-913-3

  Query Match             15.6%;  Score 173.8;  DB 3;  Length 5510;
  Best Local Similarity   69.7%;  Pred. No. 1.1e-34;
  Matches  235;  Conservative    0;  Mismatches  102;  Indels    0;  Gaps    0;

Qy        758 TGAGCAAAGAGTACTGGGACTGTCTCGAGGGCAAGAAGAGCAAGCACGCGCCCAGAGGCA 817
              ||| || ||| |       |  |  | || || | |   ||||||   || |||||  |
Db        792 TGAAAAAGGAGCAAGACCCCCCTGCCAAGTGCCACACCAAAAAGCACAACCCGAGAGGGA 851

Qy        818 CCCACCTGTGGGAGTTCATCCGGGACATCCTCATCCACCCGGAGCTCAACGAGGGCCTCA 877
              | ||| | ||||| |||||||| ||||||||| |  |||| ||    |||   ||  | |
Db        852 CTCACTTATGGGAATTCATCCGCGACATCCTCTTGAACCCAGACAAGAACCCAGGATTAA 911

Qy        878 TGAAGTGGGAGAATCGGCATGAAGGCGTCTTCAAGTTCCTGCGCTCCGAGGCTGTGGCCC 937
              | || |||||  | ||   ||| |||||||||| |||| ||   || ||||| ||||| |
Db        912 TAAAATGGGAAGACCGATCTGAGGGCGTCTTCAGGTTCTTGAAATCAGAGGCAGTGGCTC 971

Qy        938 AACTATGGGGCCAAAAGAAAAAGAACAGCAACATGACCTACGAGAAGCTGAGCCGGGCCA 997
              | ||||||||  ||||||| || ||||||| |||||||| || ||||| |||| || |
Db        972 AGCTATGGGGTAAAAAGAAGAACAACAGCAGCATGACCTATGAAAAGCTCAGCCGAGCTA 1031

Qy        998 TGAGGTACTACTACAAACGGGAGATCCTGGAACGGGTGGATGGCCGGCGACTCGTCTACA 1057
              |||| || |||||||||| | || || ||||| || |||||||| ||  |||| || || |
Db       1032 TGAGATATTACTACAAAAGAGAAATACTGGAGCGTGTGGATGGACGAAGACTGGTATATA 1091

Qy       1058 AGTTTGGCAAAAACTCAAGCGGCTGGAAGGAGGAAGA 1094
              | ||||| || ||  |  | || ||||  ||  | ||
Db       1092 AATTTGGGAAGAATGCCCGAGGATGGAGAGAAAATGA 1128


Search completed: February 13, 2004, 01:54:40
Job time : 65.1925 secs
```

GenCore version 5.1.6

OM protein - nucleic search, using frame_plus_p2n model

Run on: February 12, 2004, 21:34:51 ; Search time 583.817 Seconds
(without alignments)
2334.540 Million cell updates/sec

Title: US-08-978-217-16_COPY_2_371
Perfect score: 1980
Sequence: 1 AATCEISNVFSNYFNAMYSS.....YKFGKNSSGWKEEEVGESRN 370

Scoring table: BLOSUM62
Xgapop 10.0 , Xgapext 0.5
Ygapop 10.0 , Ygapext 0.5
Fgapop 6.0 , Fgapext 7.0
Delop 6.0 , Delext 7.0

Searched: 2449703 seqs, 1841816367 residues

Total number of hits satisfying chosen parameters: 4899406

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Command line parameters:
-MODEL=frame+_p2n.model -DEV=xlh
-Q=/cgn2_1/USPTO_spool/US08978217/runat_10022004_133827_20514/app_query.fasta_1.1500
-DB=Published_Applications_NA -QFMT=fastap -SUFFIX=rnpb -MINMATCH=0.1
-LOOPCL=0 -LOOPEXT=0 -UNITS=bits -START=1 -END=-1 -MATRIX=blosum62
-TRANS=human40.cdi -LIST=45 -DOCALIGN=200 -THR_SCORE=pct -THR_MAX=100
-THR_MIN=0 -ALIGN=15 -MODE=LOCAL -OUTFMT=pto -NORM=ext -HEAPSIZE=500 -MINLEN=0
-MAXLEN=2000000000 -USER=US08978217_@CGN_1_1_690_@runat_10022004_133827_20514
-NCPU=6 -ICPU=3 -NO_MMAP -LARGEQUERY -NEG_SCORES=0 -WAIT -DSPBLOCK=100
-LONGLOG -DEV_TIMEOUT=120 -WARN_TIMEOUT=30 -THREADS=1 -XGAPOP=10 -XGAPEXT=0.5
-FGAPOP=6 -FGAPEXT=7 -YGAPOP=10 -YGAPEXT=0.5 -DELOP=6 -DELEXT=7

Database : Published_Applications_NA:*
1: /cgn2_6/ptodata/1/pubpna/US07_PUBCOMB.seq:*
2: /cgn2_6/ptodata/1/pubpna/PCT_NEW_PUB.seq:*
3: /cgn2_6/ptodata/1/pubpna/US06_NEW_PUB.seq:*
4: /cgn2_6/ptodata/1/pubpna/US06_PUBCOMB.seq:*
5: /cgn2_6/ptodata/1/pubpna/US07_NEW_PUB.seq:*
6: /cgn2_6/ptodata/1/pubpna/PCTUS_PUBCOMB.seq:*
7: /cgn2_6/ptodata/1/pubpna/US08_NEW_PUB.seq:*
8: /cgn2_6/ptodata/1/pubpna/US08_PUBCOMB.seq:*
9: /cgn2_6/ptodata/1/pubpna/US09A_PUBCOMB.seq:*
10: /cgn2_6/ptodata/1/pubpna/US09B_PUBCOMB.seq:*
11: /cgn2_6/ptodata/1/pubpna/US09C_PUBCOMB.seq:*
12: /cgn2_6/ptodata/1/pubpna/US09_NEW_PUB.seq:*
13: /cgn2_6/ptodata/1/pubpna/US09_NEW_PUB.seq2:*
14: /cgn2_6/ptodata/1/pubpna/US10A_PUBCOMB.seq:*
15: /cgn2_6/ptodata/1/pubpna/US10B_PUBCOMB.seq:*
16: /cgn2_6/ptodata/1/pubpna/US10_NEW_PUB.seq:*
17: /cgn2_6/ptodata/1/pubpna/US60_NEW_PUB.seq:*
18: /cgn2_6/ptodata/1/pubpna/US60_PUBCOMB.seq:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

	Result No.	Score	% Query Match	Length	DB	ID	Description
	1	1707	86.2	1907	15	US-10-097-340-74	Sequence 74, Appl
	2	1707	86.2	1915	10	US-09-964-824A-101	Sequence 101, App
	3	1707	86.2	1915	10	US-09-964-824A-563	Sequence 563, App
	4	1707	86.2	1915	10	US-09-880-107-3420	Sequence 3420, Ap
	5	1707	86.2	1915	10	US-09-967-768A-192	Sequence 192, App
	6	1707	86.2	1917	9	US-09-922-217-1105	Sequence 1105, Ap
	7	1707	86.2	1917	14	US-10-025-380-1105	Sequence 1105, Ap
	8	1707	86.2	1956	12	US-10-264-049-756	Sequence 756, App
	9	1707	86.2	1996	9	US-09-925-301-207	Sequence 207, App
	10	1458.5	73.7	2269	12	US-10-131-410-64	Sequence 64, Appl
c	11	928.5	46.9	626	9	US-09-922-217-853	Sequence 853, App
c	12	928.5	46.9	626	10	US-09-833-263-853	Sequence 853, App
c	13	928.5	46.9	626	14	US-10-025-380-853	Sequence 853, App
c	14	833.5	42.1	563	9	US-09-922-217-944	Sequence 944, App
c	15	833.5	42.1	563	10	US-09-833-263-944	Sequence 944, App
c	16	833.5	42.1	563	14	US-10-025-380-944	Sequence 944, App
	17	803	40.6	502	9	US-09-604-287A-282	Sequence 282, App
	18	803	40.6	502	10	US-09-339-338-282	Sequence 282, App
	19	803	40.6	502	11	US-09-551-621-282	Sequence 282, App
	20	803	40.6	502	13	US-10-124-805-282	Sequence 282, App
	21	803	40.6	502	14	US-10-007-805-282	Sequence 282, App
	22	803	40.6	502	15	US-10-076-622-282	Sequence 282, App
c	23	765	38.6	499	10	US-09-998-598-2290	Sequence 2290, Ap
	24	590.5	29.8	1426	9	US-09-925-297-309	Sequence 309, App
	25	590.5	29.8	1426	15	US-10-106-698-935	Sequence 935, App
	26	585	29.5	1429	10	US-09-764-864-320	Sequence 320, App
c	27	550.5	27.8	437	10	US-09-998-598-2216	Sequence 2216, Ap
c	28	543	27.4	852	9	US-09-759-143-44	Sequence 44, Appl
c	29	543	27.4	852	9	US-09-780-669-44	Sequence 44, Appl
c	30	543	27.4	852	9	US-09-030-606-44	Sequence 44, Appl
c	31	543	27.4	852	9	US-09-822-827-44	Sequence 44, Appl
c	32	543	27.4	852	9	US-09-115-453-44	Sequence 44, Appl
c	33	543	27.4	852	10	US-09-232-880-44	Sequence 44, Appl
c	34	543	27.4	852	10	US-09-895-793-44	Sequence 44, Appl
c	35	543	27.4	852	10	US-09-895-814-44	Sequence 44, Appl
c	36	543	27.4	852	13	US-10-144-678A-44	Sequence 44, Appl
c	37	543	27.4	852	13	US-10-294-025-44	Sequence 44, Appl
c	38	543	27.4	852	14	US-10-012-896-44	Sequence 44, Appl
c	39	543	27.4	852	15	US-10-010-940-44	Sequence 44, Appl
	40	527.5	26.6	355	10	US-09-867-701-4818	Sequence 4818, Ap
c	41	483.5	24.4	1435	12	US-10-292-798-1601	Sequence 1601, Ap
c	42	483.5	24.4	1435	13	US-10-017-161-1953	Sequence 1953, Ap
	43	442	22.3	5045	10	US-09-974-298-12	Sequence 12, Appl
	44	435.5	22.0	275	15	US-10-060-036-3261	Sequence 3261, Ap
	45	435.5	22.0	1898	12	US-10-282-596-203	Sequence 203, App

ALIGNMENTS

RESULT 1
US-10-097-340-74
; Sequence 74, Application US/10097340
; Publication No. US20030087250A1
; GENERAL INFORMATION:
; APPLICANT: John MONAHAN
; APPLICANT: Manjula GANNAVARAPU
; APPLICANT: Sebastian HOERSCH
; APPLICANT: Shubhangi KAMATKAR
; APPLICANT: Steve G. KOVATS
; APPLICANT: Rachel E. MEYERS
; APPLICANT: Michael MORRISEY
; APPLICANT: Peter OLANDT
; APPLICANT: Ami SEN
; APPLICANT: Peter VEIBY
; APPLICANT: Gordon B. MILLS
; APPLICANT: Robert C. BAST, Jr.
; APPLICANT: Karen LU
; APPLICANT: Rosemarie SCHMANDT
; APPLICANT: Xumei ZHAO
; APPLICANT: Karen GLATT
; TITLE OF INVENTION: Nucleic Acid Molecules and Proteins For The Identification,
; TITLE OF INVENTION: Assessment, Prevention, and Therapy of Ovarian Cancer
; FILE REFERENCE: MRI-030

```
;  CURRENT APPLICATION NUMBER: US/10/097,340
;  CURRENT FILING DATE:  2002-03-14
;  PRIOR APPLICATION NUMBER: 60/276,025
;  PRIOR FILING DATE: 2001-03-14
;  PRIOR APPLICATION NUMBER: 60/325,149
;  PRIOR FILING DATE: 2001-09-26
;  PRIOR APPLICATION NUMBER: 60/276,026
;  PRIOR FILING DATE: 2001-03-14
;  PRIOR APPLICATION NUMBER: 60/324,967
;  PRIOR FILING DATE: 2001/09/26
;  PRIOR APPLICATION NUMBER: 60/311,732
;  PRIOR FILING DATE: 2001-08-10
;  PRIOR APPLICATION NUMBER: 60/325,102
;  PRIOR FILING DATE: 2001-09-26
;  PRIOR APPLICATION NUMBER: 60/323,580
;  PRIOR FILING DATE: 2001-09-19
;  NUMBER OF SEQ ID NOS: 363
;  SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 74
;   LENGTH: 1907
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-10-097-340-74

Alignment Scores:
Pred. No.:                1.18e-189      Length:          1907
Score:                    1707.00        Matches:         322
Percent Similarity:       92.72%         Conservative:    22
Best Local Similarity:    86.79%         Mismatches:      25
Query Match:              86.21%         Indels:          2
DB:                       15             Gaps:            2

US-08-978-217-16_COPY_2_371 (1-370) x US-10-097-340-74 (1-1907)

Qy          1 AlaAlaThrCysGluIleSerAsnValPheSerAsnTyrPheAsnAlaMetTyrSerSer 20
              |||||||||||||||||||||||:::|||||||||||||||||:::|||||||||||||||
Db         99 GCTGCAACCTGTGAGATTAGCAACATTTTTAGCAACTACTTCAGTGCGATGTACAGCTCG 158

Qy         21 GluAspProThrLeuAlaProAlaProPro---ThrThrPheGlyThrGluAspLeuVal 39
              ||||||   |||||||||      ||||||      |||||||||   :::||||||||||
Db        159 GAGGACTCCACCCTGGCCTCTGTTCCCCCTGCTGCCACCTTTGGGGCCGATGACTTGGTA 218

Qy         40 LeuThrLeuAsnAsnGlnGlnMetThrLeuGluGlyProGluLysAlaSerTrpThrSer 59
              |||||||||:::|||   ||||||:::|||||||||   ||||||||||||||||
Db        219 CTGACCCTGAGCAACCCCCAGATGTCATTGGAGGGTACAGAGAAGGCCAGCTGGTTGGGG 278

Qy         60 GluArgProGlnPheTrpSerLysThrGlnValLeuGluTrpIleSerTyrGlnValGlu 79
              |||:::|||||||||||||||||||||||||||||:::|||||||||||||||||||||
Db        279 GAACAGCCCCAGTTCTGGTCGAAGACGCAGGTTCTGGACTGGATCAGCTACCAAGTGGAG 338

Qy         80 LysAsnLysTyrAspAlaSerSerIleAspPheSerArgCysAsnMetAspGlyAlaThr 99
              |||||||||||||||||||:::|||||||||||||||||||:::|||||||||||||||||
Db        339 AAGAACAAGTACGACGCAAGCGCCATTGACTTCTCACGATGTGACATGGATGGCGCCACC 398

Qy        100 LeuCysSerCysAlaLeuGluGluLeuArgLeuValPheGlyProLeuGlyAspGlnLeu 119
              ||||||:::|||||||||||||||||||||||||||||||||||||||||||||||||||
Db        399 CTCTGCAATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGCCTCTGGGGGACCAACTC 458

Qy        120 HisAlaGlnLeuArgAspLeuThrSerAsnSerSerAspGluLeuSerTrpIleIleGlu 139
              |||||||||||||||||||||||||:::|||||||||||||||||||||||||||||||||
Db        459 CATGCCCAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATTGAG 518

Qy        140 LeuLeuGluLysAspGlyMetSerPheGlnGluSerLeuGlyAspLeuGlyProPheAsp 159
              ||||||||||||||||||:::|||||||:::|||   |||   ||||||||||||
Db        519 CTGCTGGAGAAGGATGGCATGGCCTTCCAGGAGGCCCTA---GACCCAGGGCCCTTTGAC 575

Qy        160 GlnGlySerProPheAlaGlnGluLeuLeuAspAspGlyArgGlnAlaSerProTyrTyr 179
              |||||||||||||||||||||||||||||||||||:::|||||||||||||||||||:::
Db        576 CAGGGCAGCCCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCAC 635

Qy        180 CysSerThrTyrGlyProGlyAlaProSerProGlySerSerAspValSerThrAlaArg 199
                    :::   |||   ||||||||||||||||||||||||||||||||||||||||||
Db        636 CCCGGCAGCTGTGGCGCAGGAGCCCCCTCCCCTGGCAGCTCTGACGTCTCCACCGCAGGG 695

Qy        200 ThrAlaThrProGlnSerSerHisAlaSerAspSerGlyGlySerAspValAspLeuAsp 219
              |||          :::|||||||||:::|||||||||||||||||||||||||||||||
Db        696 ACTGGTGCTTCTCGGAGCTCCCACTCCTCAGACTCCGGTGGAAGTGACGTGGACCTGGAT 755

Qy        220 LeuThrGluSerLysValProProArgAspAspPheThrAspTyrLysLysGlyGluPro 239
                 |||:::   |||:::||||||   |||   |||   |||   ||||||||||:::|||
Db        756 CCCACTGATGGCAAGCTCTTCCCCAGCGATGGTTTTCGTGACTGCAAGAAGGGGGATCCC 815

Qy        240 LysHisGlyLysArgLysArgGlyArgProArgLysLeuSerLysGluTyrTrpAspCys 259
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        816 AAGCACGGGAAGCGGAAACGAGGCCGGCCCCGAAAGCTGAGCAAAGAGTACTGGGACTGT 875

Qy        260 LeuGluGlyLysLysSerLysHisAlaProArgGlyThrHisLeuTrpGluPheIleArg 279
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        876 CTCGAGGGCAAGAAGAGCAAGCACGCGCCCAGAGGCACCCACCTGTGGGAGTTCATCCGG 935

Qy        280 AspIleLeuIleHisProGluLeuAsnGluGlyLeuMetLysTrpGluAsnArgHisGlu 299
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        936 GACATCCTCATCCACCCGGAGCTCAACGAGGGCCTCATGAAGTGGGAGAATCGGCATGAA 995

Qy        300 GlyValPheLysPheLeuArgSerGluAlaValAlaGlnLeuTrpGlyGlnLysLysLys 319
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        996 GGCGTCTTCAAGTTCCTGCGCTCCGAGGCTGTGGCCCAACTATGGGGCCAAAAGAAAAAG 1055

Qy        320 AsnSerAsnMetThrTyrGluLysLeuSerArgAlaMetArgTyrTyrTyrLysArgGlu 339
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1056 AACAGCAACATGACCTACGAGAAGCTGAGCCGGGCCATGAGGTACTACTACAAACGGGAG 1115

Qy        340 IleLeuGluArgValAspGlyArgArgLeuValTyrLysPheGlyLysAsnSerSerGly 359
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1116 ATCCTGGAACGGGTGGATGGCCGGCGACTCGTCTACAAGTTTGGCAAAAACTCAAGCGGC 1175

Qy        360 TrpLysGluGluGluValGlyGluSerArgAsn 370
              |||||||||||||||||   :::|||||||||
Db       1176 TGGAAGGAGGAAGAGGTTCTCCAGAGTCGGAAC 1208

RESULT 2
US-09-964-824A-101
; Sequence 101, Application US/09964824A
; Patent No. US20020102531A1
; GENERAL INFORMATION:
;  APPLICANT: Horrigan, Stephen
;  TITLE OF INVENTION: Cancer Gene Determination and Therapeutic Screening Using Signatu
;  TITLE OF INVENTION:  Sets
;  FILE REFERENCE: 689290-73
;  CURRENT APPLICATION NUMBER: US/09/964,824A
;  CURRENT FILING DATE:  2001-09-27
;  PRIOR APPLICATION NUMBER: US/60/236,033
;  PRIOR FILING DATE: 2000-09-28
;  PRIOR APPLICATION NUMBER: US/60/236,032
;  PRIOR FILING DATE: 2000-09-28
;  PRIOR APPLICATION NUMBER: US/60/236,028
;  PRIOR FILING DATE: 2000-09-28
;  NUMBER OF SEQ ID NOS: 583
;  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 101
;   LENGTH: 1915
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-964-824A-101

Alignment Scores:
Pred. No.:                1.19e-189      Length:          1915
Score:                    1707.00        Matches:         322
Percent Similarity:       92.72%         Conservative:    22
Best Local Similarity:    86.79%         Mismatches:      25
Query Match:              86.21%         Indels:          2
DB:                       10             Gaps:            2

US-08-978-217-16_COPY_2_371 (1-370) x US-09-964-824A-101 (1-1915)

Qy          1 AlaAlaThrCysGluIleSerAsnValPheSerAsnTyrPheAsnAlaMetTyrSerSer 20
```

```
Db        123 GCTGCAACCTGTGAGATTAGCAACATTTTTAGCAACTACTTCAGTGCGATGTACAGCTCG 182

Qy         21 GluAspProThrLeuAlaProAlaProPro---ThrThrPheGlyThrGluAspLeuVal  39

Db        183 GAGGACTCCACCCTGGCCTCTGTTCCCCCTGCTGCCACCTTTGGGGCCGATGACTTGGTA 242

Qy         40 LeuThrLeuAsnAsnGlnGlnMetThrLeuGluGlyProGluLysAlaSerTrpThrSer  59

Db        243 CTGACCCTGAGCAACCCCCAGATGTCATTGGAGGGTACAGAGAAGGCCAGCTGGTTGGGG 302

Qy         60 GluArgProGlnPheTrpSerLysThrGlnValLeuGluTrpIleSerTyrGlnValGlu  79

Db        303 GAACAGCCCCAGTTCTGGTCGAAGACGCAGGTTCTGGACTGGATCAGCTACCAAGTGGAG 362

Qy         80 LysAsnLysTyrAspAlaSerSerIleAspPheSerArgCysAsnMetAspGlyAlaThr  99

Db        363 AAGAACAAGTACGACGCAAGCGCCATTGACTTCTCACGATGTGACATGGATGGCGCCACC 422

Qy        100 LeuCysSerCysAlaLeuGluGluLeuArgLeuValPheGlyProLeuGlyAspGlnLeu 119

Db        423 CTCTGCAATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGCCTCTGGGGGACCAACTC 482

Qy        120 HisAlaGlnLeuArgAspLeuThrSerAsnSerSerAspGluLeuSerTrpIleIleGlu 139

Db        483 CATGCCCAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATTGAG 542

Qy        140 LeuLeuGluLysAspGlyMetSerPheGlnGluSerLeuGlyAspLeuGlyProPheAsp 159

Db        543 CTGCTGGAGAAGGATGGCATGGCCTTCCAGGAGGCCCTA---GACCCAGGGCCCTTTGAC 599

Qy        160 GlnGlySerProPheAlaGlnGluLeuLeuAspAspGlyArgGlnAlaSerProTyrTyr 179

Db        600 CAGGGCAGCCCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCAC 659

Qy        180 CysSerThrTyrGlyProGlyAlaProSerProGlySerSerAspValSerThrAlaArg 199

Db        660 CCCGGCAGCTGTGGCGCAGGAGCCCCCTCCCCTGGCAGCTCTGACGTCTCCACCGCAGGG 719

Qy        200 ThrAlaThrProGlnSerSerHisAlaSerAspSerGlyGlySerAspValAspLeuAsp 219

Db        720 ACTGGTGCTTCTCGGAGCTCCCACTCCTCAGACTCCGGTGGAAGTGACGTGGACCTGGAT 779

Qy        220 LeuThrGluSerLysValProProArgAspAspPheThrAspTyrLysLysGlyGluPro 239

Db        780 CCCACTGATGGCAAGCTCTTCCCCAGCGATGGTTTTCGTGACTGCAAGAAGGGGGATCCC 839

Qy        240 LysHisGlyLysArgLysArgGlyArgProArgLysLeuSerLysGluTyrTrpAspCys 259

Db        840 AAGCACGGGAAGCGGAAACGAGGCCGGCCCCGAAAGCTGAGCAAAGAGTACTGGGACTGT 899

Qy        260 LeuGluGlyLysLysSerLysHisAlaProArgGlyThrHisLeuTrpGluPheIleArg 279

Db        900 CTCGAGGGCAAGAAGAGCAAGCACGCGCCCAGAGGCACCCACCTGTGGGAGTTCATCCGG 959

Qy        280 AspIleLeuIleHisProGluLeuAsnGluGlyLeuMetLysTrpGluAsnArgHisGlu 299

Db        960 GACATCCTCATCCACCCGGAGCTCAACGAGGGCCTCATGAAGTGGGAGAATCGGCATGAA 1019

Qy        300 GlyValPheLysPheLeuArgSerGluAlaValAlaGlnLeuTrpGlyGlnLysLysLys 319

Db       1020 GGCGTCTTCAAGTTCCTGCGCTCCGAGGCTGTGGCCCAACTATGGGGCCAAAAGAAAAAG 1079

Qy        320 AsnSerAsnMetThrTyrGluLysLeuSerArgAlaMetArgTyrTyrTyrLysArgGlu 339

Db       1080 AACAGCAACATGACCTACGAGAAGCTGAGCCGGGCCATGAGGTACTACTACAAACGGGAG 1139

Qy        340 IleLeuGluArgValAspGlyArgArgLeuValTyrLysPheGlyLysAsnSerSerGly 359

Db       1140 ATCCTGGAACGGGTGGATGGCCGGCGACTCGTCTACAAGTTTGGCAAAAACTCAAGCGGC 1199

Qy        360 TrpLysGluGluGluValGlyGluSerArgAsn 370

Db       1200 TGGAAGGAGGAAGAGGTTCTCCAGAGTCGGAAC 1232
```

RESULT 3
US-09-964-824A-563
; Sequence 563, Application US/09964824A
; Patent No. US20020102531A1
; GENERAL INFORMATION:
; APPLICANT: Horrigan, Stephen
; TITLE OF INVENTION: Cancer Gene Determination and Therapeutic Screening Using Signatu
; TITLE OF INVENTION: Sets
; FILE REFERENCE: 689290-73
; CURRENT APPLICATION NUMBER: US/09/964,824A
; CURRENT FILING DATE: 2001-09-27
; PRIOR APPLICATION NUMBER: US/60/236,033
; PRIOR FILING DATE: 2000-09-28
; PRIOR APPLICATION NUMBER: US/60/236,032
; PRIOR FILING DATE: 2000-09-28
; PRIOR APPLICATION NUMBER: US/60/236,028
; PRIOR FILING DATE: 2000-09-28
; NUMBER OF SEQ ID NOS: 583
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 563
; LENGTH: 1915
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-964-824A-563

Alignment Scores:

Pred. No.:	1.19e-189	Length:	1915
Score:	1707.00	Matches:	322
Percent Similarity:	92.72%	Conservative:	22
Best Local Similarity:	86.79%	Mismatches:	25
Query Match:	86.21%	Indels:	2
DB:	10	Gaps:	2

US-08-978-217-16_COPY_2_371 (1-370) x US-09-964-824A-563 (1-1915)

```
Qy          1 AlaAlaThrCysGluIleSerAsnValPheSerAsnTyrPheAsnAlaMetTyrSerSer  20

Db        123 GCTGCAACCTGTGAGATTAGCAACATTTTTAGCAACTACTTCAGTGCGATGTACAGCTCG 182

Qy         21 GluAspProThrLeuAlaProAlaProPro---ThrThrPheGlyThrGluAspLeuVal  39

Db        183 GAGGACTCCACCCTGGCCTCTGTTCCCCCTGCTGCCACCTTTGGGGCCGATGACTTGGTA 242

Qy         40 LeuThrLeuAsnAsnGlnGlnMetThrLeuGluGlyProGluLysAlaSerTrpThrSer  59

Db        243 CTGACCCTGAGCAACCCCCAGATGTCATTGGAGGGTACAGAGAAGGCCAGCTGGTTGGGG 302

Qy         60 GluArgProGlnPheTrpSerLysThrGlnValLeuGluTrpIleSerTyrGlnValGlu  79

Db        303 GAACAGCCCCAGTTCTGGTCGAAGACGCAGGTTCTGGACTGGATCAGCTACCAAGTGGAG 362

Qy         80 LysAsnLysTyrAspAlaSerSerIleAspPheSerArgCysAsnMetAspGlyAlaThr  99

Db        363 AAGAACAAGTACGACGCAAGCGCCATTGACTTCTCACGATGTGACATGGATGGCGCCACC 422

Qy        100 LeuCysSerCysAlaLeuGluGluLeuArgLeuValPheGlyProLeuGlyAspGlnLeu 119

Db        423 CTCTGCAATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGCCTCTGGGGGACCAACTC 482

Qy        120 HisAlaGlnLeuArgAspLeuThrSerAsnSerSerAspGluLeuSerTrpIleIleGlu 139

Db        483 CATGCCCAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATTGAG 542

Qy        140 LeuLeuGluLysAspGlyMetSerPheGlnGluSerLeuGlyAspLeuGlyProPheAsp 159

Db        543 CTGCTGGAGAAGGATGGCATGGCCTTCCAGGAGGCCCTA---GACCCAGGGCCCTTTGAC 599

Qy        160 GlnGlySerProPheAlaGlnGluLeuLeuAspAspGlyArgGlnAlaSerProTyrTyr 179

Db        600 CAGGGCAGCCCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCAC 659
```

```
Qy       180 CysSerThrTyrGlyProGlyAlaProSerProGlySerSerAspValSerThrAlaArg 199
Db       660 CCCGGCAGCTGTGGCGCAGGAGCCCCCTCCCCTGGCAGCTCTGACGTCTCCACCGCAGGG 719

Qy       200 ThrAlaThrProGlnSerSerHisAlaSerAspSerGlyGlySerAspValAspLeuAsp 219
Db       720 ACTGGTGCTTCTCGGAGCTCCCACTCCTCAGACTCCGGTGGAAGTGACGTGGACCTGGAT 779

Qy       220 LeuThrGluSerLysValProArgAspAspPheThrAspTyrLysLysGlyGluPro 239
Db       780 CCCACTGATGGCAAGCTCTTCCCCAGCGATGGTTTTCGTGACTGCAAGAAGGGGGATCCC 839

Qy       240 LysHisGlyLysArgLysArgGlyArgProArgLysLeuSerLysGluTyrTrpAspCys 259
Db       840 AAGCACGGGAAGCGGAAACGAGGCCGGCCCCGAAAGCTGAGCAAAGAGTACTGGGACTGT 899

Qy       260 LeuGluGlyLysLysSerLysHisAlaProArgGlyThrHisLeuTrpGluPheIleArg 279
Db       900 CTCGAGGGCAAGAAGAGCAAGCACGCGCCCAGAGGCACCCACCTGTGGGAGTTCATCCGG 959

Qy       280 AspIleLeuIleHisProGluLeuAsnGluGlyLeuMetLysTrpGluAsnArgHisGlu 299
Db       960 GACATCCTCATCCACCCGGAGCTCAACGAGGGCCTCATGAAGTGGGAGAATCGGCATGAA 1019

Qy       300 GlyValPheLysPheLeuArgSerGluAlaValAlaGlnLeuTrpGlyGlnLysLysLys 319
Db      1020 GGCGTCTTCAAGTTCCTGCGCTCCGAGGCTGTGGCCCAACTATGGGGCCAAAAGAAAAAG 1079

Qy       320 AsnSerAsnMetThrTyrGluLysLeuSerArgAlaMetArgTyrTyrTyrLysArgGlu 339
Db      1080 AACAGCAACATGACCTACGAGAAGCTGAGCCGGGCCATGAGGTACTACTACAAACGGGAG 1139

Qy       340 IleLeuGluArgValAspGlyArgArgLeuValTyrLysPheGlyLysAsnSerSerGly 359
Db      1140 ATCCTGGAACGGGTGGATGGCCGGCGACTCGTCTACAAGTTTGGCAAAAACTCAAGCGGC 1199

Qy       360 TrpLysGluGluGluValGlyGluSerArgAsn 370
Db      1200 TGGAAGGAGGAAGAGGTTCTCCAGAGTCGGAAC 1232
```

```
RESULT 4
US-09-880-107-3420
; Sequence 3420, Application US/09880107
; Patent No. US20020142981A1
; GENERAL INFORMATION:
;  APPLICANT: Horne, Darci T.
;  APPLICANT:  Vockley, Joseph G.
;  APPLICANT:  Scherf, Uwe
;  APPLICANT:  Gene Logic, Inc.
;  TITLE OF INVENTION: Gene Expression Profiles in Liver Cancer
;  FILE REFERENCE: 44921-5028-WO
;  CURRENT APPLICATION NUMBER: US/09/880,107
;  CURRENT FILING DATE:  2001-06-14
;  PRIOR APPLICATION NUMBER: US 60/211,379
;  PRIOR FILING DATE: 2000-06-14
;  PRIOR APPLICATION NUMBER: US 60/237,054
;  PRIOR FILING DATE: 2000-10-02
;  NUMBER OF SEQ ID NOS: 3950
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 3420
;   LENGTH: 1915
;   TYPE: DNA
;   ORGANISM: Homo sapiens
;   FEATURE:
;   OTHER INFORMATION: Genbank Accession No. US20020142981A1 U73843
US-09-880-107-3420

Alignment Scores:
Pred. No.:              1.19e-189       Length:         1915
Score:                  1707.00         Matches:        322
Percent Similarity:     92.72%          Conservative:   22
Best Local Similarity:  86.79%          Mismatches:     25
Query Match:            86.21%          Indels:         2
```

```
DB:                    10            Gaps:          2

US-08-978-217-16_COPY_2_371 (1-370) x US-09-880-107-3420 (1-1915)

Qy         1 AlaAlaThrCysGluIleSerAsnValPheSerAsnTyrPheAsnAlaMetTyrSerSer 20
Db       123 GCTGCAACCTGTGAGATTAGCAACATTTTTAGCAACTACTTCAGTGCGATGTACAGCTCG 182

Qy        21 GluAspProThrLeuAlaProAlaProPro---ThrThrPheGlyThrGluAspLeuVal 39
Db       183 GAGGACTCCACCCTGGCCTCTGTTCCCCCTGCTGCCACCTTTGGGGCCGATGACTTGGTA 242

Qy        40 LeuThrLeuAsnAsnGlnGlnMetThrLeuGluGlyProGluLysAlaSerTrpThrSer 59
Db       243 CTGACCCTGAGCAACCCCCAGATGTCATTGGAGGGTACAGAGAAGGCCAGCTGGTTGGGG 302

Qy        60 GluArgProGlnPheTrpSerLysThrGlnValLeuGluTrpIleSerTyrGlnValGlu 79
Db       303 GAACAGCCCCAGTTCTGGTCGAAGACGCAGGTTCTGGACTGGATCAGCTACCAAGTGGAG 362

Qy        80 LysAsnLysTyrAspAlaSerSerIleAspPheSerArgCysAsnMetAspGlyAlaThr 99
Db       363 AAGAACAAGTACGACGCAAGCGCCATTGACTTCTCACGATGTGACATGGATGGCGCCACC 422

Qy       100 LeuCysSerCysAlaLeuGluGluLeuArgLeuValPheGlyProLeuGlyAspGlnLeu 119
Db       423 CTCTGCAATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGCCTCTGGGGGACCAACTC 482

Qy       120 HisAlaGlnLeuArgAspLeuThrSerAsnSerSerAspGluLeuSerTrpIleIleGlu 139
Db       483 CATGCCCAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATTGAG 542

Qy       140 LeuLeuGluLysAspGlyMetSerPheGlnGluSerLeuGlyAspLeuGlyProPheAsp 159
Db       543 CTGCTGGAGAAGGATGGCATGGCCTTCCAGGAGGCCCTA---GACCCAGGGCCCTTTGAC 599

Qy       160 GlnGlySerProPheAlaGlnGluLeuLeuAspAspGlyArgGlnAlaSerProTyrTyr 179
Db       600 CAGGGCAGCCCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCAC 659

Qy       180 CysSerThrTyrGlyProGlyAlaProSerProGlySerSerAspValSerThrAlaArg 199
Db       660 CCCGGCAGCTGTGGCGCAGGAGCCCCCTCCCCTGGCAGCTCTGACGTCTCCACCGCAGGG 719

Qy       200 ThrAlaThrProGlnSerSerHisAlaSerAspSerGlyGlySerAspValAspLeuAsp 219
Db       720 ACTGGTGCTTCTCGGAGCTCCCACTCCTCAGACTCCGGTGGAAGTGACGTGGACCTGGAT 779

Qy       220 LeuThrGluSerLysValProArgAspAspPheThrAspTyrLysLysGlyGluPro 239
Db       780 CCCACTGATGGCAAGCTCTTCCCCAGCGATGGTTTTCGTGACTGCAAGAAGGGGGATCCC 839

Qy       240 LysHisGlyLysArgLysArgGlyArgProArgLysLeuSerLysGluTyrTrpAspCys 259
Db       840 AAGCACGGGAAGCGGAAACGAGGCCGGCCCCGAAAGCTGAGCAAAGAGTACTGGGACTGT 899

Qy       260 LeuGluGlyLysLysSerLysHisAlaProArgGlyThrHisLeuTrpGluPheIleArg 279
Db       900 CTCGAGGGCAAGAAGAGCAAGCACGCGCCCAGAGGCACCCACCTGTGGGAGTTCATCCGG 959

Qy       280 AspIleLeuIleHisProGluLeuAsnGluGlyLeuMetLysTrpGluAsnArgHisGlu 299
Db       960 GACATCCTCATCCACCCGGAGCTCAACGAGGGCCTCATGAAGTGGGAGAATCGGCATGAA 1019

Qy       300 GlyValPheLysPheLeuArgSerGluAlaValAlaGlnLeuTrpGlyGlnLysLysLys 319
Db      1020 GGCGTCTTCAAGTTCCTGCGCTCCGAGGCTGTGGCCCAACTATGGGGCCAAAAGAAAAAG 1079

Qy       320 AsnSerAsnMetThrTyrGluLysLeuSerArgAlaMetArgTyrTyrTyrLysArgGlu 339
Db      1080 AACAGCAACATGACCTACGAGAAGCTGAGCCGGGCCATGAGGTACTACTACAAACGGGAG 1139

Qy       340 IleLeuGluArgValAspGlyArgArgLeuValTyrLysPheGlyLysAsnSerSerGly 359
```

```
                 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1140 ATCCTGGAACGGGTGGATGGCCGGCGACTCGTCTACAAGTTTGGCAAAAACTCAAGCGGC 1199

Qy        360 TrpLysGluGluGluValGlyGluSerArgAsn 370
                 ||||||||||||||||||    :::|||||||||
Db       1200 TGGAAGGAGGAAGAGGTTCTCCAGAGTCGGAAC 1232

RESULT 5
US-09-967-768A-192
; Sequence 192, Application US/09967768A
; Patent No. US20020150877A1
; GENERAL INFORMATION:
;  APPLICANT: Augustus, Meena
;  TITLE OF INVENTION: Cancer Gene Determination and Therapeutic Screening Using Signatu
;  TITLE OF INVENTION:  Sets
;  FILE REFERENCE: 689290-72
;  CURRENT APPLICATION NUMBER: US/09/967,768A
;  CURRENT FILING DATE:  2001-09-28
;  PRIOR APPLICATION NUMBER: US/60/236,109
;  PRIOR FILING DATE: 2000-09-28
;  PRIOR APPLICATION NUMBER: US/60/236,034
;  PRIOR FILING DATE: 2000-09-28
;  PRIOR APPLICATION NUMBER: US/60/236,111
;  PRIOR FILING DATE: 2000-09-28
;  NUMBER OF SEQ ID NOS: 325
;  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 192
;   LENGTH: 1915
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-967-768A-192

Alignment Scores:
Pred. No.:                1.19e-189       Length:          1915
Score:                    1707.00         Matches:         322
Percent Similarity:       92.72%          Conservative:    22
Best Local Similarity:    86.79%          Mismatches:      25
Query Match:              86.21%          Indels:          2
DB:                       10              Gaps:            2

US-08-978-217-16_COPY_2_371 (1-370) x US-09-967-768A-192 (1-1915)

Qy          1 AlaAlaThrCysGluIleSerAsnValPheSerAsnTyrPheAsnAlaMetTyrSerSer 20
              ||||||||||||||||||||||||:::||||||||||||||:::||||||||||||||||
Db        123 GCTGCAACCTGTGAGATTAGCAACATTTTTAGCAACTACTTCAGTGCGATGTACAGCTCG 182

Qy         21 GluAspProThrLeuAlaProAlaProPro---ThrThrPheGlyThrGluAspLeuVal 39
              ||||||   |||||||||      ||||||      |||||||||   :::||||||||||
Db        183 GAGGACTCCACCCTGGCCTCTGTTCCCCCTGCTGCCACCTTTGGGGCCGATGACTTGGTA 242

Qy         40 LeuThrLeuAsnAsnGlnGlnMetThrLeuGluGlyProGluLysAlaSerTrpThrSer 59
              |||||||||:::|||    ||||||:::|||||||||    ||||||||||||||||
Db        243 CTGACCCTGAGCAACCCCCAGATGTCATTGGAGGGTACAGAGAAGGCCAGCTGGTTGGGG 302

Qy         60 GluArgProGlnPheTrpSerLysThrGlnValLeuGluTrpIleSerTyrGlnValGlu 79
              |||:::|||||||||||||||||||||||||||||:::|||||||||||||||||||||
Db        303 GAACAGCCCCAGTTCTGGTCGAAGACGCAGGTTCTGGACTGGATCAGCTACCAAGTGGAG 362

Qy         80 LysAsnLysTyrAspAlaSerSerIleAspPheSerArgCysAsnMetAspGlyAlaThr 99
              ||||||||||||||||||||:::||||||||||||||||:::|||||||||||||||||
Db        363 AAGAACAAGTACGACGCAAGCGCCATTGACTTCTCACGATGTGACATGGATGGCGCCACC 422

Qy        100 LeuCysSerCysAlaLeuGluGluLeuArgLeuValPheGlyProLeuGlyAspGlnLeu 119
              |||||:::||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        423 CTCTGCAATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGCCTCTGGGGGACCAACTC 482

Qy        120 HisAlaGlnLeuArgAspLeuThrSerAsnSerSerAspGluLeuSerTrpIleIleGlu 139
              ||||||||||||||||||||||||:::||||||||||||||||||||||||||||||||
Db        483 CATGCCCAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATTGAG 542

Qy        140 LeuLeuGluLysAspGlyMetSerPheGlnGluSerLeuGlyAspLeuGlyProPheAsp 159
              ||||||||||||||||||||:::||||||||:::|||   |||   ||||||||||||
Db        543 CTGCTGGAGAAGGATGGCATGGCCTTCCAGGAGGCCCTA---GACCCAGGGCCCTTTGAC 599

Qy        160 GlnGlySerProPheAlaGlnGluLeuLeuAspAspGlyArgGlnAlaSerProTyrTyr 179
              ||||||||||||||||||||||||||||||||||||||||:::|||||||||||||:::
Db        600 CAGGGCAGCCCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCAC 659

Qy        180 CysSerThrTyrGlyProGlyAlaProSerProGlySerSerAspValSerThrAlaArg 199
                    :::   |||   ||||||||||||||||||||||||||||||||||||||||
Db        660 CCCGGCAGCTGTGGCGCAGGAGCCCCCTCCCCTGGCAGCTCTGACGTCTCCACCGCAGGG 719

Qy        200 ThrAlaThrProGlnSerSerHisAlaSerAspSerGlyGlySerAspValAspLeuAsp 219
              |||          :::||||||||:::||||||||||||||||||||||||||||||||
Db        720 ACTGGTGCTTCTCGGAGCTCCCACTCCTCAGACTCCGGTGGAAGTGACGTGGACCTGGAT 779

Qy        220 LeuThrGluSerLysValProProArgAspAspPheThrAspTyrLysLysGlyGluPro 239
                  |||:::   |||:::||||||   |||   |||   |||   |||||||||:::|||
Db        780 CCCACTGATGGCAAGCTCTTCCCCAGCGATGGTTTTCGTGACTGCAAGAAGGGGGATCCC 839

Qy        240 LysHisGlyLysArgLysArgGlyArgProArgLysLeuSerLysGluTyrTrpAspCys 259
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        840 AAGCACGGGAAGCGGAAACGAGGCCGGCCCCGAAAGCTGAGCAAAGAGTACTGGGACTGT 899

Qy        260 LeuGluGlyLysLysSerLysHisAlaProArgGlyThrHisLeuTrpGluPheIleArg 279
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        900 CTCGAGGGCAAGAAGAGCAAGCACGCGCCCAGAGGCACCCACCTGTGGGAGTTCATCCGG 959

Qy        280 AspIleLeuIleHisProGluLeuAsnGluGlyLeuMetLysTrpGluAsnArgHisGlu 299
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        960 GACATCCTCATCCACCCGGAGCTCAACGAGGGCCTCATGAAGTGGGAGAATCGGCATGAA 1019

Qy        300 GlyValPheLysPheLeuArgSerGluAlaValAlaGlnLeuTrpGlyGlnLysLysLys 319
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1020 GGCGTCTTCAAGTTCCTGCGCTCCGAGGCTGTGGCCCAACTATGGGGCCAAAAGAAAAAG 1079

Qy        320 AsnSerAsnMetThrTyrGluLysLeuSerArgAlaMetArgTyrTyrTyrLysArgGlu 339
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1080 AACAGCAACATGACCTACGAGAAGCTGAGCCGGGCCATGAGGTACTACTACAAACGGGAG 1139

Qy        340 IleLeuGluArgValAspGlyArgArgLeuValTyrLysPheGlyLysAsnSerSerGly 359
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1140 ATCCTGGAACGGGTGGATGGCCGGCGACTCGTCTACAAGTTTGGCAAAAACTCAAGCGGC 1199

Qy        360 TrpLysGluGluGluValGlyGluSerArgAsn 370
              ||||||||||||||||||    :::|||||||||
Db       1200 TGGAAGGAGGAAGAGGTTCTCCAGAGTCGGAAC 1232

RESULT 6
US-09-922-217-1105
; Sequence 1105, Application US/09922217
; Patent No. US20020076414A1
; GENERAL INFORMATION:
;  APPLICANT: Xu, Jiangchun
;  APPLICANT:  Lodes, Michael J.
;  APPLICANT:  Secrist, Heather
;  APPLICANT:  Benson, Darin R.
;  APPLICANT:  Meagher, Madeleine Joy
;  APPLICANT:  Stolk, John A.
;  APPLICANT:  Wang, Tongtong
;  APPLICANT:  Jiang, Yuqiu
;  APPLICANT:  Smith, Carole Lynn
;  APPLICANT:  King, Gordon E.
;  APPLICANT:  Wang, Aijun
;  APPLICANT:  Clapper, Jonathan D.
;  TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY AND DIAGNOSIS
;  TITLE OF INVENTION:  OF COLON CANCER AND METHODS FOR THEIR USE
;  FILE REFERENCE: 210121.471C13
;  CURRENT APPLICATION NUMBER: US/09/922,217
;  CURRENT FILING DATE:  2001-08-03
;  NUMBER OF SEQ ID NOS: 1124
;  SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 1105
;   LENGTH: 1917
;   TYPE: DNA
;   ORGANISM: Homo sapiens
```

US-09-922-217-1105

Alignment Scores:

Pred. No.:	1.19e-189	Length:	1917
Score:	1707.00	Matches:	322
Percent Similarity:	92.72%	Conservative:	22
Best Local Similarity:	86.79%	Mismatches:	25
Query Match:	86.21%	Indels:	2
DB:	9	Gaps:	2

US-08-978-217-16_COPY_2_371 (1-370) x US-09-922-217-1105 (1-1917)

```
Qy          1 AlaAlaThrCysGluIleSerAsnValPheSerAsnTyrPheAsnAlaMetTyrSerSer 20
              |||||||||||||||||||||||||:::|||||||||||||||||:::||||||||||||||||||
Db        125 GCTGCAACCTGTGAGATTAGCAACATTTTTAGCAACTACTTCAGTGCGATGTACAGCTCG 184

Qy         21 GluAspProThrLeuAlaProAlaProPro---ThrThrPheGlyThrGluAspLeuVal 39
              ||||||   |||||||||       ||||||      |||||||||   :::||||||||||
Db        185 GAGGACTCCACCCTGGCCTCTGTTCCCCCTGCTGCCACCTTTGGGGCCGATGACTTGGTA 244

Qy         40 LeuThrLeuAsnAsnGlnGlnMetThrLeuGluGlyProGluLysAlaSerTrpThrSer 59
              |||||||||:::|||   ||||||:::|||||||||   ||||||||||||||||
Db        245 CTGACCCTGAGCAACCCCCAGATGTCATTGGAGGGTACAGAGAAGGCCAGCTGGTTGGGG 304

Qy         60 GluArgProGlnPheTrpSerLysThrGlnValLeuGluTrpIleSerTyrGlnValGlu 79
              |||:::||||||||||||||||||||||||||||:::||||||||||||||||||||||
Db        305 GAACAGCCCCAGTTCTGGTCGAAGACGCAGGTTCTGGACTGGATCAGCTACCAAGTGGAG 364

Qy         80 LysAsnLysTyrAspAlaSerSerIleAspPheSerArgCysAsnMetAspGlyAlaThr 99
              |||||||||||||||||||:::||||||||||||||||||:::||||||||||||||||||
Db        365 AAGAACAAGTACGACGCAAGCGCCATTGACTTCTCACGATGTGACATGGATGGCGCCACC 424

Qy        100 LeuCysSerCysAlaLeuGluGluLeuArgLeuValPheGlyProLeuGlyAspGlnLeu 119
              ||||||:::||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        425 CTCTGCAATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGCCTCTGGGGGACCAACTC 484

Qy        120 HisAlaGlnLeuArgAspLeuThrSerAsnSerSerAspGluLeuSerTrpIleIleGlu 139
              |||||||||||||||||||||||||:::||||||||||||||||||||||||||||||||||
Db        485 CATGCCCAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATTGAG 544

Qy        140 LeuLeuGluLysAspGlyMetSerPheGlnGluSerLeuGlyAspLeuGlyProPheAsp 159
              ||||||||||||||||||:::||||||||:::|||   |||   |||||||||||||||||
Db        545 CTGCTGGAGAAGGATGGCATGGCCTTCCAGGAGGCCCTA---GACCCAGGGCCCTTTGAC 601

Qy        160 GlnGlySerProPheAlaGlnGluLeuLeuAspAspGlyArgGlnAlaSerProTyrTyr 179
              ||||||||||||||||||||||||||||||||||||||:::||||||||||||||||:::
Db        602 CAGGGCAGCCCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCAC 661

Qy        180 CysSerThrTyrGlyProGlyAlaProSerProGlySerSerAspValSerThrAlaArg 199
                 :::   |||   ||||||||||||||||||||||||||||||||||||||||||||||
Db        662 CCCGGCAGCTGTGGCGCAGGAGCCCCCTCCCCTGGCAGCTCTGACGTCTCCACCGCAGGG 721

Qy        200 ThrAlaThrProGlnSerSerHisAlaSerAspSerGlyGlySerAspValAspLeuAsp 219
              |||          :::|||||||||:::||||||||||||||||||||||||||||||||||
Db        722 ACTGGTGCTTCTCGGAGCTCCCACTCCTCAGACTCCGGTGGAAGTGACGTGGACCTGGAT 781

Qy        220 LeuThrGluSerLysValPheProArgAspAspPheThrAspTyrLysLysGlyGluPro 239
                 |||:::   |||:::||||||   |||   |||   |||   |||||||||:::|||
Db        782 CCCACTGATGGCAAGCTCTTCCCCAGCGATGGTTTTCGTGACTGCAAGAAGGGGGATCCC 841

Qy        240 LysHisGlyLysArgLysArgGlyArgProArgLysLeuSerLysGluTyrTrpAspCys 259
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        842 AAGCACGGGAAGCGGAAACGAGGCCGGCCCCGAAAGCTGAGCAAAGAGTACTGGGACTGT 901

Qy        260 LeuGluGlyLysLysSerLysHisAlaProArgGlyThrHisLeuTrpGluPheIleArg 279
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        902 CTCGAGGGCAAGAAGAGCAAGCACGCGCCCAGAGGCACCCACCTGTGGGAGTTCATCCGG 961

Qy        280 AspIleLeuIleHisProGluLeuAsnGluGlyLeuMetLysTrpGluAsnArgHisGlu 299
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        962 GACATCCTCATCCACCCGGAGCTCAACGAGGGCCTCATGAAGTGGGAGAATCGGCATGAA 1021

Qy        300 GlyValPheLysPheLeuArgSerGluAlaValAlaGlnLeuTrpGlyGlnLysLysLys 319
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1022 GGCGTCTTCAAGTTCCTGCGCTCCGAGGCTGTGGCCCAACTATGGGGCCAAAAGAAAAAG 1081

Qy        320 AsnSerAsnMetThrTyrGluLysLeuSerArgAlaMetArgTyrTyrTyrLysArgGlu 339
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1082 AACAGCAACATGACCTACGAGAAGCTGAGCCGGGCCATGAGGTACTACTACAAACGGGAG 1141

Qy        340 IleLeuGluArgValAspGlyArgArgLeuValTyrLysPheGlyLysAsnSerSerGly 359
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1142 ATCCTGGAACGGGTGGATGGCCGGCGACTCGTCTACAAGTTTGGCAAAAACTCAAGCGGC 1201

Qy        360 TrpLysGluGluGluValGlyGluSerArgAsn 370
              ||||||||||||||||||   :::||||||||||
Db       1202 TGGAAGGAGGAAGAGGTTCTCCAGAGTCGGAAC 1234
```

RESULT 7
US-10-025-380-1105
; Sequence 1105, Application US/10025380
; Publication No. US20020182191A1
; GENERAL INFORMATION:
; APPLICANT: Xu, Jiangchun
; APPLICANT: Lodes, Michael J.
; APPLICANT: Secrist, Heather
; APPLICANT: Benson, Darin R.
; APPLICANT: Meagher, Madeleine Joy
; APPLICANT: Stolk, John A.
; APPLICANT: Wang, Tongtong
; APPLICANT: Jiang, Yuqiu
; APPLICANT: Smith, Carole L.
; APPLICANT: King, Gordon E.
; APPLICANT: Wang, Aijun
; APPLICANT: Clapper, Jonathan D.
; APPLICANT: Skeiky, Yasir A. W.
; APPLICANT: Fanger, Gary R.
; APPLICANT: Vedvick Thomas S.
; APPLICANT: Carter, Darrick
; TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY AND DIAGNOSIS
; TITLE OF INVENTION: OF COLON CANCER AND METHODS FOR THEIR USE
; FILE REFERENCE: 210121.471C14
; CURRENT APPLICATION NUMBER: US/10/025,380
; CURRENT FILING DATE: 2001-12-19
; NUMBER OF SEQ ID NOS: 1129
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 1105
; LENGTH: 1917
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-025-380-1105

Alignment Scores:

Pred. No.:	1.19e-189	Length:	1917
Score:	1707.00	Matches:	322
Percent Similarity:	92.72%	Conservative:	22
Best Local Similarity:	86.79%	Mismatches:	25
Query Match:	86.21%	Indels:	2
DB:	14	Gaps:	2

US-08-978-217-16_COPY_2_371 (1-370) x US-10-025-380-1105 (1-1917)

```
Qy          1 AlaAlaThrCysGluIleSerAsnValPheSerAsnTyrPheAsnAlaMetTyrSerSer 20
              |||||||||||||||||||||||||:::|||||||||||||||||:::||||||||||||||||||
Db        125 GCTGCAACCTGTGAGATTAGCAACATTTTTAGCAACTACTTCAGTGCGATGTACAGCTCG 184

Qy         21 GluAspProThrLeuAlaProAlaProPro---ThrThrPheGlyThrGluAspLeuVal 39
              ||||||   |||||||||       ||||||      |||||||||   :::||||||||||
Db        185 GAGGACTCCACCCTGGCCTCTGTTCCCCCTGCTGCCACCTTTGGGGCCGATGACTTGGTA 244

Qy         40 LeuThrLeuAsnAsnGlnGlnMetThrLeuGluGlyProGluLysAlaSerTrpThrSer 59
              |||||||||:::|||   ||||||:::|||||||||   ||||||||||||||||
Db        245 CTGACCCTGAGCAACCCCCAGATGTCATTGGAGGGTACAGAGAAGGCCAGCTGGTTGGGG 304

Qy         60 GluArgProGlnPheTrpSerLysThrGlnValLeuGluTrpIleSerTyrGlnValGlu 79
              |||:::||||||||||||||||||||||||||||:::||||||||||||||||||||||
```

```
Db        305 GAACAGCCCCAGTTCTGGTCGAAGACGCAGGTTCTGGACTGGATCAGCTACCAAGTGGAG 364

Qy         80 LysAsnLysTyrAspAlaSerSerIleAspPheSerArgCysAsnMetAspGlyAlaThr 99

Db        365 AAGAACAAGTACGACGCAAGCGCCATTGACTTCTCACGATGTGACATGGATGGCGCCACC 424

Qy        100 LeuCysSerCysAlaLeuGluGluLeuArgLeuValPheGlyProLeuGlyAspGlnLeu 119

Db        425 CTCTGCAATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGCCTCTGGGGGACCAACTC 484

Qy        120 HisAlaGlnLeuArgAspLeuThrSerAsnSerSerAspGluLeuSerTrpIleIleGlu 139

Db        485 CATGCCCAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATTGAG 544

Qy        140 LeuLeuGluLysAspGlyMetSerPheGlnGluSerLeuGlyAspLeuGlyProPheAsp 159

Db        545 CTGCTGGAGAAGGATGGCATGGCCTTCCAGGAGGCCCTA---GACCCAGGGCCCTTTGAC 601

Qy        160 GlnGlySerProPheAlaGlnGluLeuLeuAspAspGlyArgGlnAlaSerProTyrTyr 179

Db        602 CAGGGCAGCCCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCAC 661

Qy        180 CysSerThrTyrGlyProGlyAlaProSerProGlySerSerAspValSerThrAlaArg 199

Db        662 CCCGGCAGCTGTGGCGCAGGAGCCCCCTCCCCTGGCAGCTCTGACGTCTCCACCGCAGGG 721

Qy        200 ThrAlaThrProGlnSerSerHisAlaSerAspSerGlyGlySerAspValAspLeuAsp 219

Db        722 ACTGGTGCTTCTCGGAGCTCCCACTCCTCAGACTCCGGTGGAAGTGACGTGGACCTGGAT 781

Qy        220 LeuThrGluSerLysValPheProArgAspAspPheThrAspTyrLysLysGlyGluPro 239

Db        782 CCCACTGATGGCAAGCTCTTCCCCAGCGATGGTTTTCGTGACTGCAAGAAGGGGGATCCC 841

Qy        240 LysHisGlyLysArgLysArgGlyArgProArgLysLeuSerLysGluTyrTrpAspCys 259

Db        842 AAGCACGGGAAGCGGAAACGAGGCCGGCCCCGAAAGCTGAGCAAAGAGTACTGGGACTGT 901

Qy        260 LeuGluGlyLysLysSerLysHisAlaProArgGlyThrHisLeuTrpGluPheIleArg 279

Db        902 CTCGAGGGCAAGAAGAGCAAGCACGCGCCCAGAGGCACCCACCTGTGGGAGTTCATCCGG 961

Qy        280 AspIleLeuIleHisProGluLeuAsnGluGlyLeuMetLysTrpGluAsnArgHisGlu 299

Db        962 GACATCCTCATCCACCCGGAGCTCAACGAGGGCCTCATGAAGTGGGAGAATCGGCATGAA 1021

Qy        300 GlyValPheLysPheLeuArgSerGluAlaValAlaGlnLeuTrpGlyGlnLysLysLys 319

Db       1022 GGCGTCTTCAAGTTCCTGCGCTCCGAGGCTGTGGCCCAACTATGGGGCCAAAAGAAAAAG 1081

Qy        320 AsnSerAsnMetThrTyrGluLysLeuSerArgAlaMetArgTyrTyrTyrLysArgGlu 339

Db       1082 AACAGCAACATGACCTACGAGAAGCTGAGCCGGGCCATGAGGTACTACTACAAACGGGAG 1141

Qy        340 IleLeuGluArgValAspGlyArgArgLeuValTyrLysPheGlyLysAsnSerSerGly 359

Db       1142 ATCCTGGAACGGGTGGATGGCCGGCGACTCGTCTACAAGTTTGGCAAAAACTCAAGCGGC 1201

Qy        360 TrpLysGluGluGluValGlyGluSerArgAsn 370

Db       1202 TGGAAGGAGGAAGAGGTTCTCCAGAGTCGGAAC 1234

RESULT 8
US-10-264-049-756
; Sequence 756, Application US/10264049
; Publication No. US20040005579A1
; GENERAL INFORMATION:
;  APPLICANT: Birse et al.
;  TITLE OF INVENTION: Nucleic Acids, Proteins, and Antibodies
;  FILE REFERENCE: PA133P1
;  CURRENT APPLICATION NUMBER: US/10/264,049
;  CURRENT FILING DATE:  2002-10-04
;  PRIOR APPLICATION NUMBER: PCT/US01/18569
;  PRIOR FILING DATE: 2001-06-07
;  PRIOR APPLICATION NUMBER: US 60/209,467
;  PRIOR FILING DATE: 2000-06-07
;  NUMBER OF SEQ ID NOS: 4360
;  SOFTWARE: PatentIn Ver. 3.1
; SEQ ID NO 756
;   LENGTH: 1956
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-10-264-049-756

Alignment Scores:
Pred. No.:                1.23e-189       Length:          1956
Score:                    1707.00         Matches:         322
Percent Similarity:       92.72%          Conservative:    22
Best Local Similarity:    86.79%          Mismatches:      25
Query Match:              86.21%          Indels:          2
DB:                       12              Gaps:            2

US-08-978-217-16_COPY_2_371 (1-370) x US-10-264-049-756 (1-1956)

Qy          1 AlaAlaThrCysGluIleSerAsnValPheSerAsnTyrPheAsnAlaMetTyrSerSer 20

Db        164 GCTGCAACCTGTGAGATTAGCAACATTTTTAGCAACTACTTCAGTGCGATGTACAGCTCG 223

Qy         21 GluAspProThrLeuAlaProAlaProPro---ThrThrPheGlyThrGluAspLeuVal 39

Db        224 GAGGACTCCACCCTGGCCTCTGTTCCCCCTGCTGCCACCTTTGGGGCCGATGACTTGGTA 283

Qy         40 LeuThrLeuAsnAsnGlnGlnMetThrLeuGluGlyProGluLysAlaSerTrpThrSer 59

Db        284 CTGACCCTGAGCAACCCCCAGATGTCATTGGAGGGTACAGAGAAGGCCAGCTGGTTGGGG 343

Qy         60 GluArgProGlnPheTrpSerLysThrGlnValLeuGluTrpIleSerTyrGlnValGlu 79

Db        344 GAACAGCCCCAGTTCTGGTCGAAGACGCAGGTTCTGGACTGGATCAGCTACCAAGTGGAG 403

Qy         80 LysAsnLysTyrAspAlaSerSerIleAspPheSerArgCysAsnMetAspGlyAlaThr 99

Db        404 AAGAACAAGTACGACGCAAGCGCCATTGACTTCTCACGATGTGACATGGATGGCGCCACC 463

Qy        100 LeuCysSerCysAlaLeuGluGluLeuArgLeuValPheGlyProLeuGlyAspGlnLeu 119

Db        464 CTCTGCAATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGCCTCTGGGGGACCAACTC 523

Qy        120 HisAlaGlnLeuArgAspLeuThrSerAsnSerSerAspGluLeuSerTrpIleIleGlu 139

Db        524 CATGCCCAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATTGAG 583

Qy        140 LeuLeuGluLysAspGlyMetSerPheGlnGluSerLeuGlyAspLeuGlyProPheAsp 159

Db        584 CTGCTGGAGAAGGATGGCATGGCCTTCCAGGAGGCCCTA---GACCCAGGGCCCTTTGAC 640

Qy        160 GlnGlySerProPheAlaGlnGluLeuLeuAspAspGlyArgGlnAlaSerProTyrTyr 179

Db        641 CAGGGCAGCCCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCAC 700

Qy        180 CysSerThrTyrGlyProGlyAlaProSerProGlySerSerAspValSerThrAlaArg 199

Db        701 CCCGGCAGCTGTGGCGCAGGAGCCCCCTCCCCYGGCAGCTCTGACGTCTCCACCGCAGGG 760

Qy        200 ThrAlaThrProGlnSerSerHisAlaSerAspSerGlyGlySerAspValAspLeuAsp 219

Db        761 ACTGGTGCTTCTCGGAGCTCCCACTCCTCAGACTCCGGTGGAAGTGACGTGGACCTGGAT 820

Qy        220 LeuThrGluSerLysValPheProArgAspAspPheThrAspTyrLysLysGlyGluPro 239

Db        821 CCCACTGATGGCAAGCTCTTCCCCAGCGATGGTTTTCGTGACTGCAAGAAGGGGGATCCC 880

Qy        240 LysHisGlyLysArgLysArgGlyArgProArgLysLeuSerLysGluTyrTrpAspCys 259

Db        881 AAGCACGGGAAGCGGAAACGAGGCCGGCCCCGAAAGCTGAGCAAAGAGTACTGGGACTGT 940
```

```
Qy        260 LeuGluGlyLysLysSerLysHisAlaProArgGlyThrHisLeuTrpGluPheIleArg 279
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        941 CTCGAGGGCAAGAAGAGCAAGCACGCGCCCAGAGGCACCCACCTGTGGGAGTTCATCCGG 1000

Qy        280 AspIleLeuIleHisProGluLeuAsnGluGlyLeuMetLysTrpGluAsnArgHisGlu 299
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1001 GACATCCTCATCCACCCGGAGCTYAACGAGGGCCTYATGAAGTGGGAGAATCGGCATGAA 1060

Qy        300 GlyValPheLysPheLeuArgSerGluAlaValAlaGlnLeuTrpGlyGlnLysLysLys 319
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1061 GGCGTCTTCAAGTTCCTGCGYTCCGAGGCTGTGGCCCAACTATGGGGCCAAAAGAAAAAG 1120

Qy        320 AsnSerAsnMetThrTyrGluLysLeuSerArgAlaMetArgTyrTyrTyrLysArgGlu 339
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1121 AACAGCAACATGACCTACGAGAAGCTGAGCCGGGCCATGAGGTACTACTACAAACGGGAG 1180

Qy        340 IleLeuGluArgValAspGlyArgArgLeuValTyrLysPheGlyLysAsnSerSerGly 359
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1181 ATCCTGGAACGGGTGGATGGCCGGCGACTCGTCTACAAGTTTGGCAAAAACTCAAGCGGC 1240

Qy        360 TrpLysGluGluGluValGlyGluSerArgAsn 370
              |||||||||||||||||   :::||||||||||
Db       1241 TGGAAGGAGGAAGAGGTTCTCCAGAGTCGGAAC 1273

RESULT 9
US-09-925-301-207
; Sequence 207, Application US/09925301
; Patent No. US20020052308A1
; GENERAL INFORMATION:
;  APPLICANT: Rosen et al.
;  TITLE OF INVENTION: Nucleic Acids, Proteins and Antibodies
;  FILE REFERENCE: PA106
;  CURRENT APPLICATION NUMBER: US/09/925,301
;  CURRENT FILING DATE:  2001-08-10
;  PRIOR APPLICATION NUMBER: PCT/US00/05882
;  PRIOR FILING DATE: 2000-03-08
;  PRIOR APPLICATION NUMBER: 60/124,270
;  PRIOR FILING DATE: 1999-03-12
;  NUMBER OF SEQ ID NOS: 1694
;  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 207
;   LENGTH: 1996
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-925-301-207

Alignment Scores:
Pred. No.:              1.26e-189       Length:         1996
Score:                  1707.00         Matches:        322
Percent Similarity:     92.72%          Conservative:   22
Best Local Similarity:  86.79%          Mismatches:     25
Query Match:            86.21%          Indels:         2
DB:                     9               Gaps:           2

US-08-978-217-16_COPY_2_371 (1-370) x US-09-925-301-207 (1-1996)

Qy          1 AlaAlaThrCysGluIleSerAsnValPheSerAsnTyrPheAsnAlaMetTyrSerSer 20
              ||||||||||||||||||||:::||||||||||||||||:::||||||||||||||||||
Db        144 GCTGCAACCTGTGAGATTAGCAACATTTTTAGCAACTACTTCAGTGCGATGTACAGCTCG 203

Qy         21 GluAspProThrLeuAlaProAlaProPro---ThrThrPheGlyThrGluAspLeuVal 39
              ||||||    |||||||||      ||||||      |||||||||    :::||||||||||
Db        204 GAGGACTCCACCCTGGCCTCTGTTCCCCCTGCTGCCACCTTTGGGGCCGATGACTTGGTA 263

Qy         40 LeuThrLeuAsnAsnGlnGlnMetThrLeuGluGlyProGluLysAlaSerTrpThrSer 59
              |||||||||:::|||   ||||||:::|||||||||    ||||||||||||||||
Db        264 CTGACCCTGAGCAACCCCCAGATGTCATTGGAGGGTACAGAGAAGGCCAGCTGGTTGGGG 323

Qy         60 GluArgProGlnPheTrpSerLysThrGlnValLeuGluTrpIleSerTyrGlnValGlu 79
              |||:::||||||||||||||||||||||||||||||:::||||||||||||||||||||
Db        324 GAACAGCCCCAGTTCTGGTCGAAGACGCAGGTTCTGGACTGGATCAGCTACCAAGTGGAG 383

Qy         80 LysAsnLysTyrAspAlaSerSerIleAspPheSerArgCysAsnMetAspGlyAlaThr 99
              ||||||||||||||||||:::||||||||||:::||||||||||:::||||||||||||||
Db        384 AAGAACAAGTACGACGCAAGCGCCATTGACTTCTCACGATGTGACATGGATGGCGCCACC 443

Qy        100 LeuCysSerCysAlaLeuGluGluLeuArgLeuValPheGlyProLeuGlyAspGlnLeu 119
              ||||||:::||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        444 CTCTGCAATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGCCTCTGGGGGACCAACTC 503

Qy        120 HisAlaGlnLeuArgAspLeuThrSerAsnSerSerAspGluLeuSerTrpIleIleGlu 139
              ||||||||||||||||||||||||||:::||||||||||||||||||||||||||||||||
Db        504 CATGCCCAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATTGAG 563

Qy        140 LeuLeuGluLysAspGlyMetSerPheGlnGluSerLeuGlyAspLeuGlyProPheAsp 159
              ||||||||||||||||||||||:::||||||||:::|||   |||   ||||||||||||
Db        564 CTGCTGGAGAAGGATGGCATGGCCTTCCAGGAGGCCCTA---GACCCAGGGCCCTTTGAC 620

Qy        160 GlnGlySerProPheAlaGlnGluLeuLeuAspAspGlyArgGlnAlaSerProTyrTyr 179
              ||||||||||||||||||||||||||||||||||||||:::|||||||||||||||:::
Db        621 CAGGGCAGCCCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCAC 680

Qy        180 CysSerThrTyrGlyProGlyAlaProSerProGlySerSerAspValSerThrAlaArg 199
              :::   |||   ||||||||||||||||||||||||||||||||||||||||||||||
Db        681 CCCGGCAGCTGTGGCGCAGGAGCCCCCTCCCCYGGCAGCTCTGACGTCTCCACCGCAGGG 740

Qy        200 ThrAlaThrProGlnSerSerHisAlaSerAspSerGlyGlySerAspValAspLeuAsp 219
              |||         :::||||||||:::||||||||||||||||||||||||||||||||||||
Db        741 ACTGGTGCTTCTCGGAGCTCCCACTCCTCAGACTCCGGTGGAAGTGACGTGGACCTGGAT 800

Qy        220 LeuThrGluSerLysValProArgAspAspPheThrAspTyrLysLysGlyGluPro 239
              |||:::   |||:::||||||   |||   |||   ||   |||||||||:::|||
Db        801 CCCACTGATGGCAAGCTCTTCCCCAGCGATGGTTTTCGTGACTGCAAGAAGGGGGATCCC 860

Qy        240 LysHisGlyLysArgLysArgGlyArgProArgLysLeuSerLysGluTyrTrpAspCys 259
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        861 AAGCACGGGAAGCGGAAACGAGGCCGGCCCCGAAAGCTGAGCAAAGAGTACTGGGACTGT 920

Qy        260 LeuGluGlyLysLysSerLysHisAlaProArgGlyThrHisLeuTrpGluPheIleArg 279
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        921 CTCGAGGGCAAGAAGAGCAAGCACGCGCCCAGAGGCACCCACCTGTGGGAGTTCATCCGG 980

Qy        280 AspIleLeuIleHisProGluLeuAsnGluGlyLeuMetLysTrpGluAsnArgHisGlu 299
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        981 GACATCCTCATCCACCCGGAGCTCAACGAGGGCCTCATGAAGTGGGAGAATCGGCATGAA 1040

Qy        300 GlyValPheLysPheLeuArgSerGluAlaValAlaGlnLeuTrpGlyGlnLysLysLys 319
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1041 GGCGTCTTCAAGTTCCTGCGCTCCGAGGCTGTGGCCCAACTATGGGGCCAAAAGAAAAAG 1100

Qy        320 AsnSerAsnMetThrTyrGluLysLeuSerArgAlaMetArgTyrTyrTyrLysArgGlu 339
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1101 AACAGCAACATGACCTACGAGAAGCTGAGCCGGGCCATGAGGTACTACTACAAACGGGAG 1160

Qy        340 IleLeuGluArgValAspGlyArgArgLeuValTyrLysPheGlyLysAsnSerSerGly 359
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1161 ATCCTGGAACGGGTGGATGGCCGGCGACTCGTCTACAAGTTTGGCAAAAACTCAAGCGGC 1220

Qy        360 TrpLysGluGluGluValGlyGluSerArgAsn 370
              |||||||||||||||||   :::||||||||||
Db       1221 TGGAAGGAGGAAGAGGTTCTCCAGAGTCGGAAC 1253

RESULT 10
US-10-131-410-64
; Sequence 64, Application US/10131410
; Publication No. US20030235915A1
; GENERAL INFORMATION:
;  APPLICANT: SPECHT, THOMAS
;  APPLICANT:  HINZMANN, BERND
;  APPLICANT:  SCHMITT, ARMIN
;  APPLICANT:  PILARSKY, CHRISTIAN
;  APPLICANT:  DAHL, EDGAR
;  APPLICANT:  ROSENTHAL, ANDRE
;  TITLE OF INVENTION: HUMAN NUCLEIC ACID SEQUENCES FROM TISSUE OF BREAST
;  TITLE OF INVENTION:  TUMORS
;  FILE REFERENCE: SCH-1763
```

```
;  CURRENT APPLICATION NUMBER: US/10/131,410
;  CURRENT FILING DATE:  2002-04-25
;  PRIOR APPLICATION NUMBER: 09/646,673
;  PRIOR FILING DATE: 2000-09-20
;  PRIOR APPLICATION NUMBER: PCT/DE99/00908
;  PRIOR FILING DATE: 1999-03-19
;  NUMBER OF SEQ ID NOS: 202
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 64
;   LENGTH: 2269
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-10-131-410-64

Alignment Scores:
Pred. No.:              2.05e-160       Length:         2269
Score:                  1458.50         Matches:        281
Percent Similarity:     93.71%          Conservative:   17
Best Local Similarity:  88.36%          Mismatches:     19
Query Match:            73.66%          Indels:         3
DB:                     12              Gaps:           1

US-08-978-217-16_COPY_2_371 (1-370) x US-10-131-410-64 (1-2269)

Qy         53 GluLysAlaSerTrpThrSerGluArgProGlnPheTrpSerLysThrGlnValLeuGlu 72
              |||||||||||||||||      |||:::|||||||||||||||||||   |||||||||:::
Db         15 GAGAAGGCCAGCTGGTTGGGGGAACAGCCCCAGTTCTGGTCGAAGAG-CAGGTTCTGGAC 73

Qy         73 TrpIleSerTyrGlnValGluLysAsnLysTyrAspAlaSerSerIleAspPheSerArg 92
              |||||||||||||||||||||||||||||||||||||:::|||||||||||||||||||
Db         74 TGGATCAGCTACCAAGTGGAGAAGAACAAGTACGACGCAAGCGCCATTGACTTCTCACGA 133

Qy         93 CysAsnMetAspGlyAlaThrLeuCysSerCysAlaLeuGluGluLeuArgLeuValPhe 112
              |||:::|||||||||||||||||||:::|||||||||||||||||||||||||||||||
Db        134 TGTGACATGGATGGCGCCACCCTCTGCAATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTT 193

Qy        113 GlyProLeuGlyAspGlnLeuHisAlaGlnLeuArgAspLeuThrSerAsnSerSerAsp 132
              |||||||||||||||||||||||||||||||||||||||||||||:::|||||||||||
Db        194 GGGCCTCTGGGGGACCAACTCCATGCCCAGCTGCGAGACCTCACTTCCAGCTCTTCTGAT 253

Qy        133 GluLeuSerTrpIleIleGluLeuLeuGluLysAspGlyMetSerPheGlnGluSerLeu 152
              |||||||||||||||||||||||||||||||||||||:::|||||||||:::|||
Db        254 GAGCTCAGTTGGATCATTGAGCTGCTGGAGAAGGATGGCATGGCCTTCCAGGAGGCCCTA 313

Qy        153 GlyAspLeuGlyProPheAspGlnGlySerProPheAlaGlnGluLeuLeuAspAspGly 172
                 |||  ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        314 ---GACCCAGGGCCCTTTGACCAGGGCAGCCCCTTTGCCCAGGAGCTGCTGGACGACGGT 370

Qy        173 ArgGlnAlaSerProTyrTyrCysSerThrTyrGlyProGlyAlaProSerProGlySer 192
              :::|||||||||||||:::    :::  |||  ||||||||||||||||||||||||||
Db        371 CAGCAAGCCAGCCCCTACCACCCCGGCAGCTGTGGCGCAGGAGCCCCCTCCCCTGGCAGC 430

Qy        193 SerAspValSerThrAlaArgThrAlaThrProGlnSerSerHisAlaSerAspSerGly 212
              |||||||||||||||  ||||||         :::||||||||:::|||||||||||||
Db        431 TCTGACGTCTCCACCGC-AGGACTGGTGCTTCTCGGAGCTCCCACTCCTCAGACTCCGGT 489

Qy        213 GlySerAspValAspLeuAspLeuThrGluSerLysValProArgAspAspPheThr 232
              |||||||||||||||||||    |||:::   |||:::||||||   |||   |||
Db        490 GGAAGTGACGTGGACCTGGATCCCACTGATGGCAAGCTCTTCCCCAGCGATGGTTTTCGT 549

Qy        233 AspTyrLysLysGlyGluProLysHisGlyLysArgLysArgGlyArgProArgLysLeu 252
              |||   |||||||||:::||||||||||||||||||||||||||||||||||||||||||
Db        550 GACTGCAAGAAGGGGGATCCCAAGCACGGGAAGCGGAAACGAGGCCGGCCCCGAAAGCTG 609

Qy        253 SerLysGluTyrTrpAspCysLeuGluGlyLysLysSerLysHisAlaProArgGlyThr 272
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        610 AGCAAAGAGTACTGGGACTGTCTCGAGGGCAAGAAGAGCAAGCACGCGCCCAGAGGCACC 669

Qy        273 HisLeuTrpGluPheIleArgAspIleLeuIleHisProGluLeuAsnGluGlyLeuMet 292
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        670 CACCTGTGGGAGTTCATCCGGGACATCCTCATCCACCCGGAGCTCAACGAGGGCCTCATG 729

Qy        293 LysTrpGluAsnArgHisGluGlyValPheLysPheLeuArgSerGluAlaValAlaGln 312
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        730 AAGTGGGAGAATCGGCATGAAGGCGTCTTCAAGTTCCTGCGCTCCGAGGCTGTGGCCCAA 789

Qy        313 LeuTrpGlyGlnLysLysLysAsnSerAsnMetThrTyrGluLysLeuSerArgAlaMet 332
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        790 CTATGGGGCCAAAAGAAAAAGAACAGCAACATGACCTACGAGAAGCTGAGCCGGGCCATG 849

Qy        333 ArgTyrTyrTyrLysArgGluIleLeuGluArgValAspGlyArgArgLeuValTyrLys 352
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        850 AGGTACTACTACAAACGGGAGATCCTGGAACGGGTGGATGGCCGGCGACTCGTCTACAAG 909

Qy        353 PheGlyLysAsnSerSerGlyTrpLysGluGluGluValGlyGluSerArgAsn 370
              |||||||||||||||||||||||||||||||||||||   :::||||||||||
Db        910 TTTGGCAAAAACTCAAGCGGCTGGAAGGAGGAAGAGGTTCTCCAGAGTCGGAAC 963

RESULT 11
US-09-922-217-853/c
; Sequence 853, Application US/09922217
; Patent No. US20020076414A1
; GENERAL INFORMATION:
;  APPLICANT: Xu, Jiangchun
;  APPLICANT:  Lodes, Michael J.
;  APPLICANT:  Secrist, Heather
;  APPLICANT:  Benson, Darin R.
;  APPLICANT:  Meagher, Madeleine Joy
;  APPLICANT:  Stolk, John A.
;  APPLICANT:  Wang, Tongtong
;  APPLICANT:  Jiang, Yuqiu
;  APPLICANT:  Smith, Carole Lynn
;  APPLICANT:  King, Gordon E.
;  APPLICANT:  Wang, Aijun
;  APPLICANT:  Clapper, Jonathan D.
;  TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY AND DIAGNOSIS
;  TITLE OF INVENTION:  OF COLON CANCER AND METHODS FOR THEIR USE
;  FILE REFERENCE: 210121.471C13
;  CURRENT APPLICATION NUMBER: US/09/922,217
;  CURRENT FILING DATE:  2001-08-03
;  NUMBER OF SEQ ID NOS: 1124
;  SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 853
;   LENGTH: 626
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-922-217-853

Alignment Scores:
Pred. No.:              4.34e-99        Length:         626
Score:                  928.50          Matches:        174
Percent Similarity:     90.91%          Conservative:   16
Best Local Similarity:  83.25%          Mismatches:     18
Query Match:            46.89%          Indels:         1
DB:                     9               Gaps:           1

US-08-978-217-16_COPY_2_371 (1-370) x US-09-922-217-853 (1-626)

Qy         51 GlyProGluLysAlaSerTrpThrSerGluArgProGlnPheTrpSerLysThrGlnVal 70
              |||   |||||||||||||||      |||:::|||||||||||||||||||||||||||
Db        624 GGTACAGAGAAGGCCAGCTGGTTGGGGGAACAGCCCCAGTTCTGGTCGAAGACGCAGGTT 565

Qy         71 LeuGluTrpIleSerTyrGlnValGluLysAsnLysTyrAspAlaSerSerIleAspPhe 90
              |||:::|||||||||||||||||||||||||||||||||||||:::|||||||||
Db        564 CTGGACTGGATCAGCTACCAAGTGGAGAAGAACAAGTACGACGCAAGCGCCATTGACTTC 505

Qy         91 SerArgCysAsnMetAspGlyAlaThrLeuCysSerCysAlaLeuGluGluLeuArgLeu 110
              |||||||||:::|||||||||||||||||||||||||:::|||||||||||||||||||
Db        504 TCACGATGTGACATGGATGGCGCCACCCTCTGCAATTGTGCCCTTGAGGAGCTGCGTCTG 445

Qy        111 ValPheGlyProLeuGlyAspGlnLeuHisAlaGlnLeuArgAspLeuThrSerAsnSer 130
              ||||||||||||||||||||||||||||||||||||||||||||||||||||:::|||
Db        444 GTCTTTGGGCCTCTGGGGGACCAACTCCATGCCCAGCTGCGAGACCTCACTTCCAGCTCT 385

Qy        131 SerAspGluLeuSerTrpIleIleGluLeuLeuGluLysAspGlyMetSerPheGlnGlu 150
              |||||||||||||||||||||||||||||||||||||||||||||||||||:::|||||||||
```

```
Db        384 TCTGATGAGCTCAGTTGGATCATTGAGCTGCTGGAGAAGGATGGCATGGCCTTCCAGGAG 325

Qy        151 SerLeuGlyAspLeuGlyProPheAspGlnGlySerProPheAlaGlnGluLeuLeuAsp 170
              :::|||   |||    ||||||||||||||||||||||||||||||||||||||||||||
Db        324 GCCCTA---GACCCAGGGCCCTTTGACCAGGGCAGCCCCTTTGCCCAGGAGCTGCTGGAC 268

Qy        171 AspGlyArgGlnAlaSerProTyrTyrCysSerThrTyrGlyProGlyAlaProSerPro 190
              ||||||:::|||||||||||||||:::       :::   |||   ||||||||||||||
Db        267 GACGGTCAGCAAGCCAGCCCCTACCACCCCGGCAGCTGTGGCGCAGGAGCCCCCTCCCCC 208

Qy        191 GlySerSerAspValSerThrAlaArgThrAlaThrProGlnSerSerHisAlaSerAsp 210
              ||||||||||||||||||||||||    |||        :::|||||||||:::||||||
Db        207 GGCAGCTCTGACGTCTCCACCGCAGGGACTGGTGCTTCTCGGAGCTCCCACTCCTCAGAC 148

Qy        211 SerGlyGlySerAspValAspLeuAspLeuThrGluSerLysValProArgAspAsp 230
              ||||||||||||||||||||||||||    |||:::   |||:::||||||   |||
Db        147 TCCGGTGGAAGTGACGTGGACCTGGATCCCACTGATGGCAAGCTCTTCCCCAGCGATGGT 88

Qy        231 PheThrAspTyrLysLysGlyGluProLysHisGlyLysArgLysArgGlyArgProArg 250
              |||   |||   ||||||||:::||||||||||||||||||||||||||||||||||||
Db         87 TTTCGTGACTGCAAGAAGGGGGATCCCAAGCACGGGAAGCGGAAACGAGGCCGGCCCCGA 28

Qy        251 LysLeuSerLysGluTyrTrpAspCys 259
              |||||||||||||||||||||||||||
Db         27 AAGCTGAGCAAAGAGTACTGGGACTGT 1

RESULT 12
US-09-833-263-853/c
; Sequence 853, Application US/09833263
; Patent No. US20020110547A1
; GENERAL INFORMATION:
;  APPLICANT: Wang, Aijun
;  APPLICANT:  Clapper, Jonathan D.
;  APPLICANT:  Stolk, John A.
;  APPLICANT:  Meagher, Madeleine J.
;  TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY AND
;  TITLE OF INVENTION:  DIAGNOSIS OF COLON CANCER AND METHODS FOR THEIR USE
;  FILE REFERENCE: 210121.471C12
;  CURRENT APPLICATION NUMBER: US/09/833,263
;  CURRENT FILING DATE:  2001-04-10
;  NUMBER OF SEQ ID NOS: 1093
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 853
;   LENGTH: 626
;   TYPE: DNA
;   ORGANISM: Homo sapien
US-09-833-263-853

Alignment Scores:
Pred. No.:              4.34e-99        Length:         626
Score:                  928.50          Matches:        174
Percent Similarity:     90.91%          Conservative:   16
Best Local Similarity:  83.25%          Mismatches:     18
Query Match:            46.89%          Indels:         1
DB:                     10              Gaps:           1

US-08-978-217-16_COPY_2_371 (1-370) x US-09-833-263-853 (1-626)

Qy         51 GlyProGluLysAlaSerTrpThrSerGluArgProGlnPheTrpSerLysThrGlnVal 70
              |||   |||||||||||||||       |||:::|||||||||||||||||||||||||
Db        624 GGTACAGAGAAGGCCAGCTGGTTGGGGGAACAGCCCCAGTTCTGGTCGAAGACGCAGGTT 565

Qy         71 LeuGluTrpIleSerTyrGlnValGluLysAsnLysTyrAspAlaSerSerIleAspPhe 90
              |||:::|||||||||||||||||||||||||||||||||||||||:::|||||||||
Db        564 CTGGACTGGATCAGCTACCAAGTGGAGAAGAACAAGTACGACGCAAGCGCCATTGACTTC 505

Qy         91 SerArgCysAsnMetAspGlyAlaThrLeuCysSerCysAlaLeuGluGluLeuArgLeu 110
              ||||||||:::|||||||||||||||||||:::|||||||||||||||||||||||||
Db        504 TCACGATGTGACATGGATGGCGCCACCCTCTGCAATTGTGCCCTTGAGGAGCTGCGTCTG 445

Qy        111 ValPheGlyProLeuGlyAspGlnLeuHisAlaGlnLeuArgAspLeuThrSerAsnSer 130
              ||||||||||||||||||||||||||||||||||||||||||||||||||:::|||
Db        444 GTCTTTGGGCCTCTGGGGGACCAACTCCATGCCCAGCTGCGAGACCTCACTTCCAGCTCT 385

Qy        131 SerAspGluLeuSerTrpIleIleGluLeuLeuGluLysAspGlyMetSerPheGlnGlu 150
              |||||||||||||||||||||||||||||||||||||||||||||||||:::|||||||||
Db        384 TCTGATGAGCTCAGTTGGATCATTGAGCTGCTGGAGAAGGATGGCATGGCCTTCCAGGAG 325

Qy        151 SerLeuGlyAspLeuGlyProPheAspGlnGlySerProPheAlaGlnGluLeuLeuAsp 170
              :::|||   |||    ||||||||||||||||||||||||||||||||||||||||||||
Db        324 GCCCTA---GACCCAGGGCCCTTTGACCAGGGCAGCCCCTTTGCCCAGGAGCTGCTGGAC 268

Qy        171 AspGlyArgGlnAlaSerProTyrTyrCysSerThrTyrGlyProGlyAlaProSerPro 190
              ||||||:::|||||||||||||||:::       :::   |||   ||||||||||||||
Db        267 GACGGTCAGCAAGCCAGCCCCTACCACCCCGGCAGCTGTGGCGCAGGAGCCCCCTCCCCC 208

Qy        191 GlySerSerAspValSerThrAlaArgThrAlaThrProGlnSerSerHisAlaSerAsp 210
              ||||||||||||||||||||||||    |||        :::|||||||||:::||||||
Db        207 GGCAGCTCTGACGTCTCCACCGCAGGGACTGGTGCTTCTCGGAGCTCCCACTCCTCAGAC 148

Qy        211 SerGlyGlySerAspValAspLeuAspLeuThrGluSerLysValProArgAspAsp 230
              ||||||||||||||||||||||||||    |||:::   |||:::||||||   |||
Db        147 TCCGGTGGAAGTGACGTGGACCTGGATCCCACTGATGGCAAGCTCTTCCCCAGCGATGGT 88

Qy        231 PheThrAspTyrLysLysGlyGluProLysHisGlyLysArgLysArgGlyArgProArg 250
              |||   |||   ||||||||:::||||||||||||||||||||||||||||||||||||
Db         87 TTTCGTGACTGCAAGAAGGGGGATCCCAAGCACGGGAAGCGGAAACGAGGCCGGCCCCGA 28

Qy        251 LysLeuSerLysGluTyrTrpAspCys 259
              |||||||||||||||||||||||||||
Db         27 AAGCTGAGCAAAGAGTACTGGGACTGT 1

RESULT 13
US-10-025-380-853/c
; Sequence 853, Application US/10025380
; Publication No. US20020182191A1
; GENERAL INFORMATION:
;  APPLICANT: Xu, Jiangchun
;  APPLICANT:  Lodes, Michael J.
;  APPLICANT:  Secrist, Heather
;  APPLICANT:  Benson, Darin R.
;  APPLICANT:  Meagher, Madeleine Joy
;  APPLICANT:  Stolk, John A.
;  APPLICANT:  Wang, Tongtong
;  APPLICANT:  Jiang, Yuqiu
;  APPLICANT:  Smith, Carole L.
;  APPLICANT:  King, Gordon E.
;  APPLICANT:  Wang, Aijun
;  APPLICANT:  Clapper, Jonathan D.
;  APPLICANT:  Skeiky, Yasir A. W.
;  APPLICANT:  Fanger, Gary R.
;  APPLICANT:  Vedvick Thomas S.
;  APPLICANT:  Carter, Darrick
;  TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY AND DIAGNOSIS
;  TITLE OF INVENTION:  OF COLON CANCER AND METHODS FOR THEIR USE
;  FILE REFERENCE: 210121.471C14
;  CURRENT APPLICATION NUMBER: US/10/025,380
;  CURRENT FILING DATE:  2001-12-19
;  NUMBER OF SEQ ID NOS: 1129
;  SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 853
;   LENGTH: 626
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-10-025-380-853

Alignment Scores:
Pred. No.:              4.34e-99        Length:         626
Score:                  928.50          Matches:        174
Percent Similarity:     90.91%          Conservative:   16
Best Local Similarity:  83.25%          Mismatches:     18
Query Match:            46.89%          Indels:         1
DB:                     14              Gaps:           1

US-08-978-217-16_COPY_2_371 (1-370) x US-10-025-380-853 (1-626)
```

```
Qy          51 GlyProGluLysAlaSerTrpThrSerGluArgProGlnPheTrpSerLysThrGlnVal 70
               |||   |||||||||||||||       |||:::|||||||||||||||||||||||||||
Db         624 GGTACAGAGAAGGCCAGCTGGTTGGGGGAACAGCCCCAGTTCTGGTCGAAGACGCAGGTT 565

Qy          71 LeuGluTrpIleSerTyrGlnValGluLysAsnLysTyrAspAlaSerSerIleAspPhe 90
               |||:::|||||||||||||||||||||||||||||||||||||||||:::|||||||||
Db         564 CTGGACTGGATCAGCTACCAAGTGGAGAAGAACAAGTACGACGCAAGCGCCATTGACTTC 505

Qy          91 SerArgCysAsnMetAspGlyAlaThrLeuCysSerCysAlaLeuGluGluLeuArgLeu 110
               ||||||||:::|||||||||||||||||||:::|||||||||||||||||||||||||
Db         504 TCACGATGTGACATGGATGGCGCCACCCTCTGCAATTGTGCCCTTGAGGAGCTGCGTCTG 445

Qy         111 ValPheGlyProLeuGlyAspGlnLeuHisAlaGlnLeuArgAspLeuThrSerAsnSer 130
               |||||||||||||||||||||||||||||||||||||||||||||||||||:::|||||
Db         444 GTCTTTGGGCCTCTGGGGGACCAACTCCATGCCCAGCTGCGAGACCTCACTTCCAGCTCT 385

Qy         131 SerAspGluLeuSerTrpIleIleGluLeuLeuGluLysAspGlyMetSerPheGlnGlu 150
               ||||||||||||||||||||||||||||||||||||||||||||||||:::|||||||||
Db         384 TCTGATGAGCTCAGTTGGATCATTGAGCTGCTGGAGAAGGATGGCATGGCCTTCCAGGAG 325

Qy         151 SerLeuGlyAspLeuGlyProPheAspGlnGlySerProPheAlaGlnGluLeuLeuAsp 170
               :::|||   |||   ||||||||||||||||||||||||||||||||||||||||||||
Db         324 GCCCTA---GACCCAGGGCCCTTTGACCAGGGCAGCCCCTTTGCCCAGGAGCTGCTGGAC 268

Qy         171 AspGlyArgGlnAlaSerProTyrTyrCysSerThrTyrGlyProGlyAlaProSerPro 190
               ||||||:::|||||||||||||:::   :::  |||   ||||||||||||||||
Db         267 GACGGTCAGCAAGCCAGCCCCTACCACCCCGGCAGCTGTGGCGCAGGAGCCCCCTCCCCC 208

Qy         191 GlySerSerAspValSerThrAlaArgThrAlaThrProGlnSerSerHisAlaSerAsp 210
               ||||||||||||||||||||||   |||        :::|||||||:::||||||
Db         207 GGCAGCTCTGACGTCTCCACCGCAGGGACTGGTGCTTCTCGGAGCTCCCACTCCTCAGAC 148

Qy         211 SerGlyGlySerAspValAspLeuAspLeuThrGluSerLysValProProArgAspAsp 230
               ||||||||||||||||||||||||   |||:::  |||:::||||||   |||
Db         147 TCCGGTGGAAGTGACGTGGACCTGGATCCCACTGATGGCAAGCTCTTCCCCAGCGATGGT 88

Qy         231 PheThrAspTyrLysLysGlyGluProLysHisGlyLysArgLysArgGlyArgProArg 250
               |||   |||   |||||||||:::||||||||||||||||||||||||||||||||||
Db          87 TTTCGTGACTGCAAGAAGGGGGATCCCAAGCACGGGAAGCGGAAACGAGGCCGGCCCCGA 28

Qy         251 LysLeuSerLysGluTyrTrpAspCys 259
               |||||||||||||||||||||||||||
Db          27 AAGCTGAGCAAAGAGTACTGGGACTGT 1
```

RESULT 14
US-09-922-217-944/c
; Sequence 944, Application US/09922217
; Patent No. US20020076414A1
; GENERAL INFORMATION:
; APPLICANT: Xu, Jiangchun
; APPLICANT: Lodes, Michael J.
; APPLICANT: Secrist, Heather
; APPLICANT: Benson, Darin R.
; APPLICANT: Meagher, Madeleine Joy
; APPLICANT: Stolk, John A.
; APPLICANT: Wang, Tongtong
; APPLICANT: Jiang, Yuqiu
; APPLICANT: Smith, Carole Lynn
; APPLICANT: King, Gordon E.
; APPLICANT: Wang, Aijun
; APPLICANT: Clapper, Jonathan D.
; TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY AND DIAGNOSIS
; TITLE OF INVENTION: OF COLON CANCER AND METHODS FOR THEIR USE
; FILE REFERENCE: 210121.471C13
; CURRENT APPLICATION NUMBER: US/09/922,217
; CURRENT FILING DATE: 2001-08-03
; NUMBER OF SEQ ID NOS: 1124
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 944
; LENGTH: 563
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-922-217-944

Alignment Scores:

Pred. No.:	5.1e-88	Length:	563
Score:	833.50	Matches:	157
Percent Similarity:	91.49%	Conservative:	15
Best Local Similarity:	83.51%	Mismatches:	15
Query Match:	42.10%	Indels:	1
DB:	9	Gaps:	1

US-08-978-217-16_COPY_2_371 (1-370) x US-09-922-217-944 (1-563)

```
Qy          72 GluTrpIleSerTyrGlnValGluLysAsnLysTyrAspAlaSerSerIleAspPheSer 91
               :::|||||||||||||||||||||||||||||||||||||||||:::||||||||||||
Db         562 GACTGGATCAGCTACCAAGTGGAGAAGAACAAGTACGACGCAAGCGCCATTGACTTCTCA 503

Qy          92 ArgCysAsnMetAspGlyAlaThrLeuCysSerCysAlaLeuGluGluLeuArgLeuVal 111
               |||||:::|||||||||||||||||||||:::|||||||||||||||||||||||||||
Db         502 CGATGTGACATGGATGGCGCCACCCTCTGCAATTGTGCCCTTGAGGAGCTGCGTCTGGTC 443

Qy         112 PheGlyProLeuGlyAspGlnLeuHisAlaGlnLeuArgAspLeuThrSerAsnSerSer 131
               |||||||||||||||||||||||||||||||||||||||||||||||||:::||||||
Db         442 TTTGGGCCTCTGGGGGACCAACTCCATGCCCAGCTGCGAGACCTCACTTCCAGCTCTTCT 383

Qy         132 AspGluLeuSerTrpIleIleGluLeuLeuGluLysAspGlyMetSerPheGlnGluSer 151
               |||||||||||||||||||||||||||||||||||||||||||||||:::|||||||:::
Db         382 GATGAGCTCAGTTGGATCATTGAGCTGCTGGAGAAGGATGGCATGGCCTTCCAGGAGGCC 323

Qy         152 LeuGlyAspLeuGlyProPheAspGlnGlySerProPheAlaGlnGluLeuLeuAspAsp 171
               |||   |||   ||||||||||||||||||||||||||||||||||||||||||||||
Db         322 CTA---GACCCAGGGCCCTTTGACCAGGGCAGCCCCTTTGCCCAGGAGCTGCTGGACGAC 266

Qy         172 GlyArgGlnAlaSerProTyrTyrCysSerThrTyrGlyProGlyAlaProSerProGly 191
               |||:::|||||||||||||||:::   :::  |||   |||||||||||||||||||
Db         265 GGTCAGCAAGCCAGCCCCTACCACCCCGGCAGCTGTGGCGCAGGAGCCCCCTCCCCCGGC 206

Qy         192 SerSerAspValSerThrAlaArgThrAlaThrProGlnSerSerHisAlaSerAspSer 211
               ||||||||||||||||||||||   |||:::  |||:::|||||||:::|||||||||
Db         205 AGCTCTGACGTCTCCACCGCAGGGACTGGTGCTTCTCGGAGCTCCCACTCCTCAGACTCC 146

Qy         212 GlyGlySerAspValAspLeuAspLeuThrGluSerLysValProProArgAspAspPhe 231
               |||||||||||||||||||||||   |||:::  |||:::||||||  |||   |||
Db         145 GGTGGAAGTGACGTGGACCTGGATCCCACTGATGGCAAGCTCTTCCCCAGCGATGGTTTT 86

Qy         232 ThrAspTyrLysLysGlyGluProLysHisGlyLysArgLysArgGlyArgProArgLys 251
                  |||  ||||||||:::|||||||||||||||||||||||||||||||||||||||
Db          85 CGTGACTGCAAGAAGGGGGATCCCAAGCACGGGAAGCGGAAACGAGGCCGGCCCCGAAAG 26

Qy         252 LeuSerLysGluTyrTrpAspCys 259
               |||||||||||||||||||||||||
Db          25 CTGAGCAAAGAGTACTGGGACTGT 2
```

RESULT 15
US-09-833-263-944/c
; Sequence 944, Application US/09833263
; Patent No. US20020110547A1
; GENERAL INFORMATION:
; APPLICANT: Wang, Aijun
; APPLICANT: Clapper, Jonathan D.
; APPLICANT: Stolk, John A.
; APPLICANT: Meagher, Madeleine J.
; TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY AND
; TITLE OF INVENTION: DIAGNOSIS OF COLON CANCER AND METHODS FOR THEIR USE
; FILE REFERENCE: 210121.471C12
; CURRENT APPLICATION NUMBER: US/09/833,263
; CURRENT FILING DATE: 2001-04-10
; NUMBER OF SEQ ID NOS: 1093
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 944
; LENGTH: 563
; TYPE: DNA
; ORGANISM: Homo sapien
US-09-833-263-944

Alignment Scores:

Pred. No.:	5.1e-88	Length:	563
Score:	833.50	Matches:	157
Percent Similarity:	91.49%	Conservative:	15
Best Local Similarity:	83.51%	Mismatches:	15
Query Match:	42.10%	Indels:	1
DB:	10	Gaps:	1

US-08-978-217-16_COPY_2_371 (1-370) x US-09-833-263-944 (1-563)

```
Qy         72 GluTrpIleSerTyrGlnValGluLysAsnLysTyrAspAlaSerSerIleAspPheSer 91
              :::|||||||||||||||||||||||||||||||||||||||||||:::|||||||||||
Db        562 GACTGGATCAGCTACCAAGTGGAGAAGAACAAGTACGACGCAAGCGCCATTGACTTCTCA 503

Qy         92 ArgCysAsnMetAspGlyAlaThrLeuCysSerCysAlaLeuGluGluLeuArgLeuVal 111
              ||||||:::|||||||||||||||||||:::|||||||||||||||||||||||||||||
Db        502 CGATGTGACATGGATGGCGCCACCCTCTGCAATTGTGCCCTTGAGGAGCTGCGTCTGGTC 443

Qy        112 PheGlyProLeuGlyAspGlnLeuHisAlaGlnLeuArgAspLeuThrSerAsnSerSer 131
              ||||||||||||||||||||||||||||||||||||||||||||||:::||||||
Db        442 TTTGGGCCTCTGGGGGACCAACTCCATGCCCAGCTGCGAGACCTCACTTCCAGCTCTTCT 383

Qy        132 AspGluLeuSerTrpIleIleGluLeuLeuGluLysAspGlyMetSerPheGlnGluSer 151
              ||||||||||||||||||||||||||||||||||||||||||:::|||||||||:::
Db        382 GATGAGCTCAGTTGGATCATTGAGCTGCTGGAGAAGGATGGCATGGCCTTCCAGGAGGCC 323

Qy        152 LeuGlyAspLeuGlyProPheAspGlnGlySerProPheAlaGlnGluLeuLeuAspAsp 171
              |||   |||   ||||||||||||||||||||||||||||||||||||||||||||||||
Db        322 CTA---GACCCAGGGCCCTTTGACCAGGGCAGCCCCTTTGCCCAGGAGCTGCTGGACGAC 266

Qy        172 GlyArgGlnAlaSerProTyrTyrCysSerThrTyrGlyProGlyAlaProSerProGly 191
              |||:::|||||||||||||||:::      :::   |||   ||||||||||||||||||
Db        265 GGTCAGCAAGCCAGCCCCTACCACCCCGGCAGCTGTGGCGCAGGAGCCCCCTCCCCCGGC 206

Qy        192 SerSerAspValSerThrAlaArgThrAlaThrProGlnSerSerHisAlaSerAspSer 211
              ||||||||||||||||||||   |||         :::|||||||||:::||||||||||
Db        205 AGCTCTGACGTCTCCACCGCAGGGACTGGTGCTTCTCGGAGCTCCCACTCCTCAGACTCC 146

Qy        212 GlyGlySerAspValAspLeuAspLeuThrGluSerLysValPheProArgAspAspPhe 231
              ||||||||||||||||||||   |||:::   |||:::||||||   |||   |||
Db        145 GGTGGAAGTGACGTGGACCTGGATCCCACTGATGGCAAGCTCTTCCCCAGCGATGGTTTT 86

Qy        232 ThrAspTyrLysLysGlyGluProLysHisGlyLysArgLysArgGlyArgProArgLys 251
                 |||   |||||||||:::|||||||||||||||||||||||||||||||||||||||
Db         85 CGTGACTGCAAGAAGGGGGATCCCAAGCACGGGAAGCGGAAACGAGGCCGGCCCCGAAAG 26

Qy        252 LeuSerLysGluTyrTrpAspCys 259
              |||||||||||||||||||||||
Db         25 CTGAGCAAAGAGTACTGGGACTGT 2
```

Search completed: February 13, 2004, 01:46:24
Job time : 599.817 secs

GenCore version 5.1.6

OM nucleic - nucleic search, using sw model

Run on: February 13, 2004, 01:27:22 ; Search time 2732.91 Seconds
(without alignments)
10448.744 Million cell updates/sec

Title: US-08-978-217-15
Perfect score: 7752
Sequence: 1 GGATCCTTCCAAGGCACTGA.....CAGAGGGGTCTCCTGGATCC 7752

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 2449703 seqs, 1841816367 residues

Total number of hits satisfying chosen parameters: 4899406

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Published_Applications_NA:*
1: /cgn2_6/ptodata/1/pubpna/US07_PUBCOMB.seq:*
2: /cgn2_6/ptodata/1/pubpna/PCT_NEW_PUB.seq:*
3: /cgn2_6/ptodata/1/pubpna/US06_NEW_PUB.seq:*
4: /cgn2_6/ptodata/1/pubpna/US06_PUBCOMB.seq:*
5: /cgn2_6/ptodata/1/pubpna/US07_NEW_PUB.seq:*
6: /cgn2_6/ptodata/1/pubpna/PCTUS_PUBCOMB.seq:*
7: /cgn2_6/ptodata/1/pubpna/US08_NEW_PUB.seq:*
8: /cgn2_6/ptodata/1/pubpna/US08_PUBCOMB.seq:*
9: /cgn2_6/ptodata/1/pubpna/US09A_PUBCOMB.seq:*
10: /cgn2_6/ptodata/1/pubpna/US09B_PUBCOMB.seq:*
11: /cgn2_6/ptodata/1/pubpna/US09C_PUBCOMB.seq:*
12: /cgn2_6/ptodata/1/pubpna/US09_NEW_PUB.seq:*
13: /cgn2_6/ptodata/1/pubpna/US09_NEW_PUB.seq2:*
14: /cgn2_6/ptodata/1/pubpna/US10A_PUBCOMB.seq:*
15: /cgn2_6/ptodata/1/pubpna/US10B_PUBCOMB.seq:*
16: /cgn2_6/ptodata/1/pubpna/US10_NEW_PUB.seq:*
17: /cgn2_6/ptodata/1/pubpna/US60_NEW_PUB.seq:*
18: /cgn2_6/ptodata/1/pubpna/US60_PUBCOMB.seq:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

	Result No.	Score	% Query Match	Length	DB	ID	Description
	1	216	2.8	1907	15	US-10-097-340-74	Sequence 74, Appl
	2	215.6	2.8	1915	10	US-09-964-824A-101	Sequence 101, App
	3	215.6	2.8	1915	10	US-09-964-824A-563	Sequence 563, App
	4	215.6	2.8	1915	10	US-09-880-107-3420	Sequence 3420, Ap
	5	215.6	2.8	1915	10	US-09-967-768A-192	Sequence 192, App
	6	215.6	2.8	1917	9	US-09-922-217-1105	Sequence 1105, Ap
	7	215.6	2.8	1917	14	US-10-025-380-1105	Sequence 1105, Ap
	8	215.6	2.8	1956	12	US-10-264-049-756	Sequence 756, App
	9	215.6	2.8	1996	9	US-09-925-301-207	Sequence 207, App
	10	215.6	2.8	2269	12	US-10-131-410-64	Sequence 64, Appl
c	11	185.8	2.4	1435	12	US-10-292-798-1601	Sequence 1601, Ap
c	12	185.8	2.4	1435	13	US-10-017-161-1953	Sequence 1953, Ap
c	13	176.2	2.3	626	9	US-09-922-217-853	Sequence 853, App
c	14	176.2	2.3	626	10	US-09-833-263-853	Sequence 853, App
c	15	176.2	2.3	626	14	US-10-025-380-853	Sequence 853, App
	16	174.2	2.2	620	15	US-10-060-036-2379	Sequence 2379, Ap
c	17	166	2.1	437	10	US-09-998-598-2216	Sequence 2216, Ap
	18	163.8	2.1	275	15	US-10-060-036-3261	Sequence 3261, Ap
c	19	163.8	2.1	499	10	US-09-998-598-2290	Sequence 2290, Ap
	20	163.8	2.1	502	9	US-09-604-287A-282	Sequence 282, App
	21	163.8	2.1	502	10	US-09-339-338-282	Sequence 282, App
	22	163.8	2.1	502	11	US-09-551-621-282	Sequence 282, App
	23	163.8	2.1	502	13	US-10-124-805-282	Sequence 282, App
	24	163.8	2.1	502	14	US-10-007-805-282	Sequence 282, App
	25	163.8	2.1	502	15	US-10-076-622-282	Sequence 282, App
	26	148	1.9	451	10	US-09-998-598-32	Sequence 32, Appl
	27	144	1.9	528	15	US-10-066-543-3233	Sequence 3233, Ap
	28	140.2	1.8	355	10	US-09-867-701-4818	Sequence 4818, Ap
c	29	132.2	1.7	563	9	US-09-922-217-944	Sequence 944, App
c	30	132.2	1.7	563	10	US-09-833-263-944	Sequence 944, App
c	31	132.2	1.7	563	14	US-10-025-380-944	Sequence 944, App
	32	125.8	1.6	33488	12	US-10-085-117-235	Sequence 235, App
	33	125.6	1.6	237	12	US-10-305-720-927	Sequence 927, App
	34	123.6	1.6	5973	10	US-09-893-238-4	Sequence 4, Appli
c	35	122	1.6	45606	12	US-10-085-117-253	Sequence 253, App
	36	121.4	1.6	214	13	US-10-029-386-26439	Sequence 26439, A
c	37	121.4	1.6	593	9	US-09-864-761-14745	Sequence 14745, A
	38	121.4	1.6	593	13	US-10-029-386-12739	Sequence 12739, A
	39	120.8	1.6	35403	12	US-10-085-117-85	Sequence 85, Appl
c	40	119.8	1.5	42533	13	US-10-004-113-43	Sequence 43, Appl
c	41	119.6	1.5	215980	11	US-09-972-546-16	Sequence 16, Appl
c	42	119.2	1.5	123192	15	US-10-175-523-71	Sequence 71, Appl
c	43	118.2	1.5	177249	12	US-10-085-117-223	Sequence 223, App
	44	117.8	1.5	165961	12	US-10-085-117-241	Sequence 241, App
c	45	117.8	1.5	263744	13	US-10-229-834A-6	Sequence 6, Appli

ALIGNMENTS

RESULT 1
US-10-097-340-74
; Sequence 74, Application US/10097340
; Publication No. US20030087250A1
; GENERAL INFORMATION:
; APPLICANT: John MONAHAN
; APPLICANT: Manjula GANNAVARAPU
; APPLICANT: Sebastian HOERSCH
; APPLICANT: Shubhangi KAMATKAR
; APPLICANT: Steve G. KOVATS
; APPLICANT: Rachel E. MEYERS
; APPLICANT: Michael MORRISEY
; APPLICANT: Peter OLANDT
; APPLICANT: Ami SEN
; APPLICANT: Peter VEIBY
; APPLICANT: Gordon B. MILLS
; APPLICANT: Robert C. BAST, Jr.
; APPLICANT: Karen LU
; APPLICANT: Rosemarie SCHMANDT
; APPLICANT: Xumei ZHAO
; APPLICANT: Karen GLATT
; TITLE OF INVENTION: Nucleic Acid Molecules and Proteins For The Identification,
; TITLE OF INVENTION: Assessment, Prevention, and Therapy of Ovarian Cancer
; FILE REFERENCE: MRI-030
; CURRENT APPLICATION NUMBER: US/10/097,340
; CURRENT FILING DATE: 2002-03-14
; PRIOR APPLICATION NUMBER: 60/276,025
; PRIOR FILING DATE: 2001-03-14
; PRIOR APPLICATION NUMBER: 60/325,149
; PRIOR FILING DATE: 2001-09-26
; PRIOR APPLICATION NUMBER: 60/276,026
; PRIOR FILING DATE: 2001-03-14
; PRIOR APPLICATION NUMBER: 60/324,967
; PRIOR FILING DATE: 2001/09/26
; PRIOR APPLICATION NUMBER: 60/311,732
; PRIOR FILING DATE: 2001-08-10
; PRIOR APPLICATION NUMBER: 60/325,102
; PRIOR FILING DATE: 2001-09-26

```
;  PRIOR APPLICATION NUMBER: 60/323,580
;  PRIOR FILING DATE: 2001-09-19
;  NUMBER OF SEQ ID NOS: 363
;  SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 74
;   LENGTH: 1907
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-10-097-340-74

  Query Match             2.8%;  Score 216;  DB 15;  Length 1907;
  Best Local Similarity   66.7%;  Pred. No. 3.3e-54;
  Matches  456;  Conservative    0;  Mismatches  195;  Indels   33;  Gaps    9;

Qy       6999 AGGTATTACTACAAACGGGAGATCCTGGAACGGGTGGATGGCCGACGGCTCGTCTACAAG 7058
              ||||| |||||||||||||||||||||||||||||||||||||||||||| || ||||||||||||
Db       1095 AGGTACTACTACAAACGGGAGATCCTGGAACGGGTGGATGGCCGGCGACTCGTCTACAAG 1154

Qy       7059 TTTGGCAAGAACTCTAGTGGCTGGAAGGAAGAAGAGGTTGGAGAGAGTCGGAATTAAGGA 7118
              |||||||| |||||  || |||||||||| |||||||||     |||||||||  | |||
Db       1155 TTTGGCAAAAACTCAAGCGGCTGGAAGGAGGAAGAGGTTCTCCAGAGTCGGAACTGAGGG 1214

Qy       7119 TCGGGGCTGGACCCAGGACCTGACTCAGGCATGAACTCCAGAACTGAAGCCTTCCTGGAA 7178
              | ||  ||  |||| |||||  |||||  | |  |        |     || |||||||||  |
Db       1215 TTGGAACTATACCCGGGACCAAACTCACGGACCACTCGAGGCCTGCAAACCTTCCTGGGA 1274

Qy       7179 GGACAGGCAGGCCTGACGGCCCCCTTAACATGGATGTGTTCCCTGTGTTGCTGTAGAGAG 7238
              |||||||||||| || || |||||  ||  ||  || ||||  |    ||||||  |||||
Db       1275 GGACAGGCAGGCCAGATGG-CCCCTCCACTGGGGAATGCTCCCAGCTGTGCTGTGGAGAG 1333

Qy       7239 GAAGAACCTGTTGGGCGTGCCCTCTGC---AGTCTCCTCAAGTGCAGCCTTTGGCCTC-- 7293
                |          || || ||    || ||    |||      |   | || || |||||||
Db       1334 AAGCTGATGTTTTGGTGTATTGTCAGCCATCGTCCTTGGACTCGGAGACTATGGCCTCGC 1393

Qy       7294 --TCTCCTCGCCCTCTTGGAATTACAAGCCCCGGGTTTGAACCAACTTGT---------- 7341
                | |  |  |||||||||||||||||||| ||| ||  |      |
Db       1394 CTCCCCACCCTCCTCTTGGAATTACAAGCCCTGGGGTTTGAAGCTGACTTTATAGCTGCA 1453

Qy       7342 --TCGATAACTCTTCCAGCTGTGATTCCAGTTCCCTCCCGTCCCAACATGGACTGCAAAT 7399
                |  ||  |  ||     |||  |||     ||    ||  |  |  |  |||| |
Db       1454 AGTGTATCTCCTTTTATCTGGTGCCTCCTCAAACCCAGTCTCAGACACTTAAATGCAGAC 1513

Qy       7400 GAGAC---CCACCTGCAGATGCCTGGCCTCAGCCAAGGAGGCTGGGGAGACTGTGGCAGG 7456
                | ||   |  ||||||||  | ||| || ||||||||||||| |||||  |  |    |
Db       1514 AACACCTTCTTCCTGCAGACACTTGGACTGAGCCAAGGAGGCTTGGGAGGCCCT----AG 1569

Qy       7457 AGACTGCAGGGACGGAGGGGACAGGGTTGTGTCCTCGGTACTTC---CTGGACTGCCTTC 7513
                ||   | | || |||| |||||| |  | | |  | | |||||    |||||||| | |
Db       1570 GGAGCACCGTGATGGAGAGGACAGAGCAGGGGCTCCAGCACTTCTTTCTGGACTGGCGTT 1629

Qy       7514 CACCTCTTTGCTCAGTACTCAGGCTCCACAGACGGGGGTCGGATCA-TCCCTAATTTATG 7572
              ||||||  |||||||| ||  |||||||| | | ||||||  || || ||||||||||||||
Db       1630 CACCTCCCTGCTCAGTGCTTGGGCTCCACGGGCAGGGGTCAGAGCACTCCCTAATTTATG 1689

Qy       7573 TGCTATA--AATATTCCAGGTGTATATAGAGAGCTATTTTTTCTAAAGCATTTCCCCTCC 7630
              |||||||  |||||  ||| |||| |||||||  |||||||||||||| |||| |||  ||
Db       1690 TGCTATATAAATATGTCAGATGTACATAGAGATCTATTTTTTCTAAAACATTCCCCTCCC 1749

Qy       7631 CTGCTCTTCTCCACTGAGTGCTGG 7654
                |   ||   |||| |||||||||
Db       1750 CACTCCTCTCCCACAGAGTGCTGG 1773


RESULT 2
US-09-964-824A-101
; Sequence 101, Application US/09964824A
; Patent No. US20020102531A1
; GENERAL INFORMATION:
;  APPLICANT: Horrigan, Stephen
;  TITLE OF INVENTION: Cancer Gene Determination and Therapeutic Screening Using Signatu
;  TITLE OF INVENTION:  Sets
;  FILE REFERENCE: 689290-73
;  CURRENT APPLICATION NUMBER: US/09/964,824A
;  CURRENT FILING DATE:  2001-09-27
;  PRIOR APPLICATION NUMBER: US/60/236,033
;  PRIOR FILING DATE: 2000-09-28
;  PRIOR APPLICATION NUMBER: US/60/236,032
;  PRIOR FILING DATE: 2000-09-28
;  PRIOR APPLICATION NUMBER: US/60/236,028
;  PRIOR FILING DATE: 2000-09-28
;  NUMBER OF SEQ ID NOS: 583
;  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 101
;   LENGTH: 1915
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-964-824A-101

  Query Match             2.8%;  Score 215.6;  DB 10;  Length 1915;
  Best Local Similarity   65.6%;  Pred. No. 4.4e-54;
  Matches  449;  Conservative    0;  Mismatches  204;  Indels   31;  Gaps    8;

Qy       6999 AGGTATTACTACAAACGGGAGATCCTGGAACGGGTGGATGGCCGACGGCTCGTCTACAAG 7058
              ||||| |||||||||||||||||||||||||||||||||||||||||||| || ||||||||||||
Db       1119 AGGTACTACTACAAACGGGAGATCCTGGAACGGGTGGATGGCCGGCGACTCGTCTACAAG 1178

Qy       7059 TTTGGCAAGAACTCTAGTGGCTGGAAGGAAGAAGAGGTTGGAGAGAGTCGGAATTAAGGA 7118
              |||||||| |||||  || |||||||||| |||||||||     |||||||||  | |||
Db       1179 TTTGGCAAAAACTCAAGCGGCTGGAAGGAGGAAGAGGTTCTCCAGAGTCGGAACTGAGGG 1238

Qy       7119 TCGGGGCTGGACCCAGGACCTGACTCAGGCATGAACTCCAGAACTGAAGCCTTCCTGGAA 7178
              | ||  ||  |||| |||||  |||||  | |  |        |     || |||||||||  |
Db       1239 TTGGAACTATACCCGGGACCAAACTCACGGACCACTCGAGGCCTGCAAACCTTCCTGGGA 1298

Qy       7179 GGACAGGCAGGCCTGACGGCCCCCTTAACATGGATGTGTTCCCTGTGTTGCTGTAGAGAG 7238
              |||||||||||| || || |||||  ||  ||  || ||||  |    ||||||  |||||
Db       1299 GGACAGGCAGGCCAGATGG-CCCCTCCACTGGGGAATGCTCCCAGCTGTGCTGTGGAGAG 1357

Qy       7239 GAAGAACCTGTTGGGCGTGCCCTCTGC---AGTCTCCTCAAGTGCAGCCTTTGGCCTC-- 7293
                |          || || ||    || ||    |||      |   | || || |||||||
Db       1358 AAGCTGATGTTTTGGTGTATTGTCAGCCATCGTCCTGGGACTCGGAGACTATGGCCTCGC 1417

Qy       7294 --TCTCCTCGCCCTCTTGGAATTACAAGCCCCGGGTTTGAACCAACTTGTTCGA------ 7345
                | |  |  |||||||||||||||||||| ||| ||  |      |||  |
Db       1418 CTCCCCACCCTCCTCTTGGAATTACAAGCCCTGGGGTTTGAAGCTGACTTTATAGCTGCA 1477

Qy       7346 --------TAACTCTTCCAGCTGTGATTCCAGTTCCCTCCCGTCCCAACATGGACTGCAA 7397
                      |  | | || |||  | | ||    ||  |    ||  |  | | |  |
Db       1478 AGTGTATCTCCTTTTATCTGGTGCCTCCTCAAACCCAGTCTCAGACACTAAATGCAGACA 1537

Qy       7398 ATGAGACCCACCTGCAGATGCCTGGCCTCAGCCAAGGAGGCTGGGGAGACTGTGGCAGGA 7457
                |       || |||||||  |||||  || ||||||||||||  |||       |||
Db       1538 ACACCTTCCTCCTGCAGACACCTGGACTGAGCCAAGGAGGCCTGGG--GAGGCCCTAGGG 1595

Qy       7458 GACTGCAGGGACGGAGGGGACAGGGTTGTGTCCTCGG----TACTTCCTGGACTGCCTTC 7513
                ||   | | || |||| |||||| |  | | |  | | |    | ||| |||||||| | |
Db       1596 GAGCACCGTGATGGAGAGGACAGAGCAGGGGCTCCAGCACCTTCTTTCTGGACTGGCGTT 1655

Qy       7514 CACCTCTTTGCTCAGTACTCAGGCTCCACAGACGGGGGTCGGATCA-TCCCTAATTTATG 7572
              ||||||  |||||||| ||  |||||||| | | ||||||  || || ||||||||||||||
Db       1656 CACCTCCCTGCTCAGTGCTTGGGCTCCACGGGCAGGGGTCAGAGCACTCCCTAATTTATG 1715

Qy       7573 TGC--TATAAATATTCCAGGTGTATATAGAGAGCTATTTTTTCTAAAGCATTTCCCCTCC 7630
              |||  |||||||||  ||| |||| |||||||  |||||||||||||| |||| |||  ||
Db       1716 TGCTATATAAATATGTCAGATGTACATAGAGATCTATTTTTTCTAAAACATTCCCCTCCC 1775

Qy       7631 CTGCTCTTCTCCACTGAGTGCTGG 7654
                |   ||   |||| |||||||||
Db       1776 CACTCCTCTCCCACAGAGTGCTGG 1799


RESULT 3
US-09-964-824A-563
; Sequence 563, Application US/09964824A
; Patent No. US20020102531A1
; GENERAL INFORMATION:
```

```
;  APPLICANT: Horrigan, Stephen
;  TITLE OF INVENTION: Cancer Gene Determination and Therapeutic Screening Using Signatu
;  TITLE OF INVENTION:  Sets
;  FILE REFERENCE: 689290-73
;  CURRENT APPLICATION NUMBER: US/09/964,824A
;  CURRENT FILING DATE:  2001-09-27
;  PRIOR APPLICATION NUMBER: US/60/236,033
;  PRIOR FILING DATE: 2000-09-28
;  PRIOR APPLICATION NUMBER: US/60/236,032
;  PRIOR FILING DATE: 2000-09-28
;  PRIOR APPLICATION NUMBER: US/60/236,028
;  PRIOR FILING DATE: 2000-09-28
;  NUMBER OF SEQ ID NOS: 583
;  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 563
;   LENGTH: 1915
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-964-824A-563

  Query Match             2.8%;  Score 215.6;  DB 10;  Length 1915;
  Best Local Similarity   65.6%;  Pred. No. 4.4e-54;
  Matches  449;  Conservative    0;  Mismatches  204;  Indels   31;  Gaps    8;

Qy       6999 AGGTATTACTACAAACGGGAGATCCTGGAACGGGTGGATGGCCGACGGCTCGTCTACAAG 7058
             ||||| |||||||||||||||||||||||||||||||||||||||| || ||||||||||||
Db       1119 AGGTACTACTACAAACGGGAGATCCTGGAACGGGTGGATGGCCGGCGACTCGTCTACAAG 1178

Qy       7059 TTTGGCAAGAACTCTAGTGGCTGGAAGGAAGAAGAGGTTGGAGAGAGTCGGAATTAAGGA 7118
             |||||||| ||||| || |||||||||| |||||||||    |||||||||| | |||
Db       1179 TTTGGCAAAAACTCAAGCGGCTGGAAGGAGGAAGAGGTTCTCCAGAGTCGGAACTGAGGG 1238

Qy       7119 TCGGGGCTGGACCCAGGACCTGACTCAGGCATGAACTCCAGAACTGAAGCCTTCCTGGAA 7178
             | ||  ||  |||| |||||  ||||| | |  |      |   || |||||||| |
Db       1239 TTGGAACTATACCCGGGACCAAACTCACGGACCACTCGAGGCCTGCAAACCTTCCTGGGA 1298

Qy       7179 GGACAGGCAGGCCTGACGGCCCCCTTAACATGGATGTGTTCCCTGTGTTGCTGTAGAGAG 7238
             |||||||||||| || || |||||  ||  ||   || |||| |   |||||| |||||
Db       1299 GGACAGGCAGGCCAGATGG-CCCCTCCACTGGGGAATGCTCCCAGCTGTGCTGTGGAGAG 1357

Qy       7239 GAAGAACCTGTTGGGCGTGCCCTCTGC---AGTCTCCTCAAGTGCAGCCTTTGGCCTC-- 7293
             |    || || ||    || ||   |||      |   | || || |||||||
Db       1358 AAGCTGATGTTTTGGTGTATTGTCAGCCATCGTCCTGGGACTCGGAGACTATGGCCTCGC 1417

Qy       7294 --TCTCCTCGCCCTCTTGGAATTACAAGCCCCGGGTTTGAACCAACTTGTTCGA------ 7345
                |  |  |||||||||||||||||||| ||| ||  |      ||  |
Db       1418 CTCCCCACCCTCCTCTTGGAATTACAAGCCCTGGGGTTTGAAGCTGACTTTATAGCTGCA 1477

Qy       7346 --------TAACTCTTCCAGCTGTGATTCCAGTTCCCTCCCGTCCCAACATGGACTGCAA 7397
                    |  | | | ||   ||  ||  |   ||  | | | | |
Db       1478 AGTGTATCTCCTTTTATCTGGTGCCTCCTCAAACCCAGTCTCAGACACTAAATGCAGACA 1537

Qy       7398 ATGAGACCCACCTGCAGATGCCTGGCCTCAGCCAAGGAGGCTGGGGAGACTGTGGCAGGA 7457
              || |||||||  ||||| || ||||||||||||  |||    |   |||
Db       1538 ACACCTTCCTCCTGCAGACACCTGGACTGAGCCAAGGAGGCCTGGG--GAGGCCCTAGGG 1595

Qy       7458 GACTGCAGGGACGGAGGGGACAGGGTTGTGTCCTCGG----TACTTCCTGGACTGCCTTC 7513
              ||   | || |||| |||||| |  | | |  | |     | ||| |||||||| | |
Db       1596 GAGCACCGTGATGGAGAGGACAGAGCAGGGGCTCCAGCACCTTCTTTCTGGACTGGCGTT 1655

Qy       7514 CACCTCTTTGCTCAGTACTCAGGCTCCACAGACGGGGGTCGGATCA-TCCCTAATTTATG 7572
              ||||||  |||||||| ||  |||||||| | | |||||| || || ||||||||||||
Db       1656 CACCTCCCTGCTCAGTGCTTGGGCTCCACGGGCAGGGGTCAGAGCACTCCCTAATTTATG 1715

Qy       7573 TGC--TATAAATATTCCAGGTGTATATAGAGAGCTATTTTTTCTAAAGCATTTCCCCTCC 7630
              |||  |||||||||  ||| |||| ||||||| |||||||||||||| |||| ||| ||
Db       1716 TGCTATATAAATATGTCAGATGTACATAGAGATCTATTTTTTCTAAAACATTCCCCTCCC 1775

Qy       7631 CTGCTCTTCTCCACTGAGTGCTGG 7654
              |  ||  |||| |||||||||
Db       1776 CACTCCTCTCCCACAGAGTGCTGG 1799
```

```
RESULT 4
US-09-880-107-3420
; Sequence 3420, Application US/09880107
; Patent No. US20020142981A1
; GENERAL INFORMATION:
;  APPLICANT: Horne, Darci T.
;  APPLICANT:  Vockley, Joseph G.
;  APPLICANT:  Scherf, Uwe
;  APPLICANT:  Gene Logic, Inc.
;  TITLE OF INVENTION: Gene Expression Profiles in Liver Cancer
;  FILE REFERENCE: 44921-5028-WO
;  CURRENT APPLICATION NUMBER: US/09/880,107
;  CURRENT FILING DATE:  2001-06-14
;  PRIOR APPLICATION NUMBER: US 60/211,379
;  PRIOR FILING DATE: 2000-06-14
;  PRIOR APPLICATION NUMBER: US 60/237,054
;  PRIOR FILING DATE: 2000-10-02
;  NUMBER OF SEQ ID NOS: 3950
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 3420
;   LENGTH: 1915
;   TYPE: DNA
;   ORGANISM: Homo sapiens
;   FEATURE:
;   OTHER INFORMATION: Genbank Accession No. US20020142981A1 U73843
US-09-880-107-3420

  Query Match             2.8%;  Score 215.6;  DB 10;  Length 1915;
  Best Local Similarity   65.6%;  Pred. No. 4.4e-54;
  Matches  449;  Conservative    0;  Mismatches  204;  Indels   31;  Gaps    8;

Qy       6999 AGGTATTACTACAAACGGGAGATCCTGGAACGGGTGGATGGCCGACGGCTCGTCTACAAG 7058
             ||||| |||||||||||||||||||||||||||||||||||||||| || ||||||||||||
Db       1119 AGGTACTACTACAAACGGGAGATCCTGGAACGGGTGGATGGCCGGCGACTCGTCTACAAG 1178

Qy       7059 TTTGGCAAGAACTCTAGTGGCTGGAAGGAAGAAGAGGTTGGAGAGAGTCGGAATTAAGGA 7118
             |||||||| ||||| || |||||||||| |||||||||    |||||||||| | |||
Db       1179 TTTGGCAAAAACTCAAGCGGCTGGAAGGAGGAAGAGGTTCTCCAGAGTCGGAACTGAGGG 1238

Qy       7119 TCGGGGCTGGACCCAGGACCTGACTCAGGCATGAACTCCAGAACTGAAGCCTTCCTGGAA 7178
             | ||  ||  |||| |||||  ||||| | |  |      |   || |||||||| |
Db       1239 TTGGAACTATACCCGGGACCAAACTCACGGACCACTCGAGGCCTGCAAACCTTCCTGGGA 1298

Qy       7179 GGACAGGCAGGCCTGACGGCCCCCTTAACATGGATGTGTTCCCTGTGTTGCTGTAGAGAG 7238
             |||||||||||| || || |||||  ||  ||   || |||| |   |||||| |||||
Db       1299 GGACAGGCAGGCCAGATGG-CCCCTCCACTGGGGAATGCTCCCAGCTGTGCTGTGGAGAG 1357

Qy       7239 GAAGAACCTGTTGGGCGTGCCCTCTGC---AGTCTCCTCAAGTGCAGCCTTTGGCCTC-- 7293
             |    || || ||    || ||   |||      |   | || || |||||||
Db       1358 AAGCTGATGTTTTGGTGTATTGTCAGCCATCGTCCTGGGACTCGGAGACTATGGCCTCGC 1417

Qy       7294 --TCTCCTCGCCCTCTTGGAATTACAAGCCCCGGGTTTGAACCAACTTGTTCGA------ 7345
                |  |  |||||||||||||||||||| ||| ||  |      ||  |
Db       1418 CTCCCCACCCTCCTCTTGGAATTACAAGCCCTGGGGTTTGAAGCTGACTTTATAGCTGCA 1477

Qy       7346 --------TAACTCTTCCAGCTGTGATTCCAGTTCCCTCCCGTCCCAACATGGACTGCAA 7397
                    |  | | | ||   ||  ||  |   ||  | | | | |
Db       1478 AGTGTATCTCCTTTTATCTGGTGCCTCCTCAAACCCAGTCTCAGACACTAAATGCAGACA 1537

Qy       7398 ATGAGACCCACCTGCAGATGCCTGGCCTCAGCCAAGGAGGCTGGGGAGACTGTGGCAGGA 7457
              || |||||||  ||||| || ||||||||||||  |||    |   |||
Db       1538 ACACCTTCCTCCTGCAGACACCTGGACTGAGCCAAGGAGGCCTGGG--GAGGCCCTAGGG 1595

Qy       7458 GACTGCAGGGACGGAGGGGACAGGGTTGTGTCCTCGG----TACTTCCTGGACTGCCTTC 7513
              ||   | || |||| |||||| |  | | |  | |     | ||| |||||||| | |
Db       1596 GAGCACCGTGATGGAGAGGACAGAGCAGGGGCTCCAGCACCTTCTTTCTGGACTGGCGTT 1655

Qy       7514 CACCTCTTTGCTCAGTACTCAGGCTCCACAGACGGGGGTCGGATCA-TCCCTAATTTATG 7572
              ||||||  |||||||| ||  |||||||| | | |||||| || || ||||||||||||
Db       1656 CACCTCCCTGCTCAGTGCTTGGGCTCCACGGGCAGGGGTCAGAGCACTCCCTAATTTATG 1715

Qy       7573 TGC--TATAAATATTCCAGGTGTATATAGAGAGCTATTTTTTCTAAAGCATTTCCCCTCC 7630
              |||  |||||||||  ||| |||| ||||||| |||||||||||||| |||| ||| ||
```

```
Db       1716 TGCTATATAAATATGTCAGATGTACATAGAGATCTATTTTTTCTAAAACATTCCCCTCCC 1775

Qy       7631 CTGCTCTTCTCCACTGAGTGCTGG 7654
              |    ||   |||| |||||||||
Db       1776 CACTCCTCTCCCACAGAGTGCTGG 1799


RESULT 5
US-09-967-768A-192
; Sequence 192, Application US/09967768A
; Patent No. US20020150877A1
; GENERAL INFORMATION:
;  APPLICANT: Augustus, Meena
;  TITLE OF INVENTION: Cancer Gene Determination and Therapeutic Screening Using Signatu
;  TITLE OF INVENTION:  Sets
;  FILE REFERENCE: 689290-72
;  CURRENT APPLICATION NUMBER: US/09/967,768A
;  CURRENT FILING DATE:  2001-09-28
;  PRIOR APPLICATION NUMBER: US/60/236,109
;  PRIOR FILING DATE: 2000-09-28
;  PRIOR APPLICATION NUMBER: US/60/236,034
;  PRIOR FILING DATE: 2000-09-28
;  PRIOR APPLICATION NUMBER: US/60/236,111
;  PRIOR FILING DATE: 2000-09-28
;  NUMBER OF SEQ ID NOS: 325
;  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 192
;   LENGTH: 1915
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-967-768A-192

  Query Match             2.8%;  Score 215.6;  DB 10;  Length 1915;
  Best Local Similarity   65.6%;  Pred. No. 4.4e-54;
  Matches  449;  Conservative    0;  Mismatches  204;  Indels   31;  Gaps    8;

Qy       6999 AGGTATTACTACAAACGGGAGATCCTGGAACGGGTGGATGGCCGACGGCTCGTCTACAAG 7058
              ||||| |||||||||||||||||||||||||||||||||||||||||| || ||||||||||||
Db       1119 AGGTACTACTACAAACGGGAGATCCTGGAACGGGTGGATGGCCGGCGACTCGTCTACAAG 1178

Qy       7059 TTTGGCAAGAACTCTAGTGGCTGGAAGGAAGAAGAGGTTGGAGAGAGTCGGAATTAAGGA 7118
              |||||||| ||||| || |||||||||| |||||||||     |||||||||| | |||
Db       1179 TTTGGCAAAAACTCAAGCGGCTGGAAGGAGGAAGAGGTTCTCCAGAGTCGGAACTGAGGG 1238

Qy       7119 TCGGGGCTGGACCCAGGACCTGACTCAGGCATGAACTCCAGAACTGAAGCCTTCCTGGAA 7178
              | ||  ||  |||| |||||  ||||| | |  |       |      || |||||||| |
Db       1239 TTGGAACTATACCCGGGACCAAACTCACGGACCACTCGAGGCCTGCAAACCTTCCTGGGA 1298

Qy       7179 GGACAGGCAGGCCTGACGGCCCCCTTAACATGGATGTGTTCCCTGTGTTGCTGTAGAGAG 7238
              |||||||||||| || || |||||  ||  ||   || |||| |   |||||| |||||
Db       1299 GGACAGGCAGGCCAGATGG-CCCCTCCACTGGGGAATGCTCCCAGCTGTGCTGTGGAGAG 1357

Qy       7239 GAAGAACCTGTTGGGCGTGCCCTCTGC---AGTCTCCTCAAGTGCAGCCTTTGGCCTC-- 7293
              |   || || ||    || ||   |||     |   | || || |||||||
Db       1358 AAGCTGATGTTTTGGTGTATTGTCAGCCATCGTCCTGGGACTCGGAGACTATGGCCTCGC 1417

Qy       7294 --TCTCCTCGCCCTCTTGGAATTACAAGCCCCGGGTTTGAACCAACTTGTTCGA------ 7345
                | |  | |||||||||||||||||||| ||| ||  |        ||  |
Db       1418 CTCCCCACCCTCCTCTTGGAATTACAAGCCCTGGGGTTTGAAGCTGACTTTATAGCTGCA 1477

Qy       7346 --------TAACTCTTCCAGCTGTGATTCCAGTTCCCTCCCGTCCCAACATGGACTGCAA 7397
                     |  | | | | ||       ||  ||  |    || |    | | |
Db       1478 AGTGTATCTCCTTTTATCTGGTGCCTCCTCAAACCCAGTCTCAGACACTAAATGCAGACA 1537

Qy       7398 ATGAGACCCACCTGCAGATGCCTGGCCTCAGCCAAGGAGGCTGGGGAGACTGTGGCAGGA 7457
              |       || |||||||  ||||| || ||||||||||||  |||     |    |||
Db       1538 ACACCTTCCTCCTGCAGACACCTGGACTGAGCCAAGGAGGCCTGGG--GAGGCCCTAGGG 1595

Qy       7458 GACTGCAGGGACGGAGGGGACAGGGTTGTGTCCTCGG----TACTTCCTGGACTGCCTTC 7513
              ||   | | || |||| |||||| |  | | |  |  |  | ||| |||||||| | |
Db       1596 GAGCACCGTGATGGAGAGGACAGAGCAGGGGCTCCAGCACCTTCTTTCTGGACTGGCGTT 1655

Qy       7514 CACCTCTTTGCTCAGTACTCAGGCTCCACAGACGGGGGTCGGATCA-TCCCTAATTTATG 7572
              |||||| |||||||| ||  |||||||| | | |||||| || || ||||||||||||||
Db       1656 CACCTCCCTGCTCAGTGCTTGGGCTCCACGGGCAGGGGTCAGAGCACTCCCTAATTTATG 1715

Qy       7573 TGC--TATAAATATTCCAGGTGTATATAGAGAGCTATTTTTTCTAAAGCATTTCCCCTCC 7630
              |||  |||||||||  ||| |||| ||||||| |||||||||||||| |||| ||| ||
Db       1716 TGCTATATAAATATGTCAGATGTACATAGAGATCTATTTTTTCTAAAACATTCCCCTCCC 1775

Qy       7631 CTGCTCTTCTCCACTGAGTGCTGG 7654
              |    ||   |||| |||||||||
Db       1776 CACTCCTCTCCCACAGAGTGCTGG 1799


RESULT 6
US-09-922-217-1105
; Sequence 1105, Application US/09922217
; Patent No. US20020076414A1
; GENERAL INFORMATION:
;  APPLICANT: Xu, Jiangchun
;  APPLICANT:  Lodes, Michael J.
;  APPLICANT:  Secrist, Heather
;  APPLICANT:  Benson, Darin R.
;  APPLICANT:  Meagher, Madeleine Joy
;  APPLICANT:  Stolk, John A.
;  APPLICANT:  Wang, Tongtong
;  APPLICANT:  Jiang, Yuqiu
;  APPLICANT:  Smith, Carole Lynn
;  APPLICANT:  King, Gordon E.
;  APPLICANT:  Wang, Aijun
;  APPLICANT:  Clapper, Jonathan D.
;  TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY AND DIAGNOSIS
;  TITLE OF INVENTION:  OF COLON CANCER AND METHODS FOR THEIR USE
;  FILE REFERENCE: 210121.471C13
;  CURRENT APPLICATION NUMBER: US/09/922,217
;  CURRENT FILING DATE:  2001-08-03
;  NUMBER OF SEQ ID NOS: 1124
;  SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 1105
;   LENGTH: 1917
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-922-217-1105

  Query Match             2.8%;  Score 215.6;  DB 9;  Length 1917;
  Best Local Similarity   65.6%;  Pred. No. 4.4e-54;
  Matches  449;  Conservative    0;  Mismatches  204;  Indels   31;  Gaps    8;

Qy       6999 AGGTATTACTACAAACGGGAGATCCTGGAACGGGTGGATGGCCGACGGCTCGTCTACAAG 7058
              ||||| |||||||||||||||||||||||||||||||||||||||||| || ||||||||||||
Db       1121 AGGTACTACTACAAACGGGAGATCCTGGAACGGGTGGATGGCCGGCGACTCGTCTACAAG 1180

Qy       7059 TTTGGCAAGAACTCTAGTGGCTGGAAGGAAGAAGAGGTTGGAGAGAGTCGGAATTAAGGA 7118
              |||||||| ||||| || |||||||||| |||||||||     |||||||||| | |||
Db       1181 TTTGGCAAAAACTCAAGCGGCTGGAAGGAGGAAGAGGTTCTCCAGAGTCGGAACTGAGGG 1240

Qy       7119 TCGGGGCTGGACCCAGGACCTGACTCAGGCATGAACTCCAGAACTGAAGCCTTCCTGGAA 7178
              | ||  ||  |||| |||||  ||||| | |  |       |      || |||||||| |
Db       1241 TTGGAACTATACCCGGGACCAAACTCACGGACCACTCGAGGCCTGCAAACCTTCCTGGGA 1300

Qy       7179 GGACAGGCAGGCCTGACGGCCCCCTTAACATGGATGTGTTCCCTGTGTTGCTGTAGAGAG 7238
              |||||||||||| || || |||||  ||  ||   || |||| |   |||||| |||||
Db       1301 GGACAGGCAGGCCAGATGG-CCCCTCCACTGGGGAATGCTCCCAGCTGTGCTGTGGAGAG 1359

Qy       7239 GAAGAACCTGTTGGGCGTGCCCTCTGC---AGTCTCCTCAAGTGCAGCCTTTGGCCTC-- 7293
              |   || || ||    || ||   |||     |   | || || |||||||
Db       1360 AAGCTGATGTTTTGGTGTATTGTCAGCCATCGTCCTGGGACTCGGAGACTATGGCCTCGC 1419

Qy       7294 --TCTCCTCGCCCTCTTGGAATTACAAGCCCCGGGTTTGAACCAACTTGTTCGA------ 7345
                | |  | |||||||||||||||||||| ||| ||  |        ||  |
Db       1420 CTCCCCACCCTCCTCTTGGAATTACAAGCCCTGGGGTTTGAAGCTGACTTTATAGCTGCA 1479

Qy       7346 --------TAACTCTTCCAGCTGTGATTCCAGTTCCCTCCCGTCCCAACATGGACTGCAA 7397
                     |  | | | | ||       ||  ||  |    || |    | | |
Db       1480 AGTGTATCTCCTTTTATCTGGTGCCTCCTCAAACCCAGTCTCAGACACTAAATGCAGACA 1539
```

```
Qy       7398 ATGAGACCCACCTGCAGATGCCTGGCCTCAGCCAAGGAGGCTGGGGAGACTGTGGCAGGA 7457
Db       1540 ACACCTTCCTCCTGCAGACACCTGGACTGAGCCAAGGAGGCCTGGG--GAGGCCCTAGGG 1597

Qy       7458 GACTGCAGGGACGGAGGGGACAGGGTTGTGTCCTCGG----TACTTCCTGGACTGCCTTC 7513
Db       1598 GAGCACCGTGATGGAGAGGACAGAGCAGGGGCTCCAGCACCTTCTTTCTGGACTGGCGTT 1657

Qy       7514 CACCTCTTTGCTCAGTACTCAGGCTCCACAGACGGGGGTCGGATCA-TCCCTAATTTATG 7572
Db       1658 CACCTCCCTGCTCAGTGCTTGGGCTCCACGGGCAGGGGTCAGAGCACTCCCTAATTTATG 1717

Qy       7573 TGC--TATAAATATTCCAGGTGTATATAGAGAGCTATTTTTTCTAAAGCATTTCCCCTCC 7630
Db       1718 TGCTATATAAATATGTCAGATGTACATAGAGATCTATTTTTTCTAAAACATTCCCCTCCC 1777

Qy       7631 CTGCTCTTCTCCACTGAGTGCTGG 7654
Db       1778 CACTCCTCTCCCACAGAGTGCTGG 1801
```

RESULT 7
US-10-025-380-1105
; Sequence 1105, Application US/10025380
; Publication No. US20020182191A1
; GENERAL INFORMATION:
; APPLICANT: Xu, Jiangchun
; APPLICANT: Lodes, Michael J.
; APPLICANT: Secrist, Heather
; APPLICANT: Benson, Darin R.
; APPLICANT: Meagher, Madeleine Joy
; APPLICANT: Stolk, John A.
; APPLICANT: Wang, Tongtong
; APPLICANT: Jiang, Yuqiu
; APPLICANT: Smith, Carole L.
; APPLICANT: King, Gordon E.
; APPLICANT: Wang, Aijun
; APPLICANT: Clapper, Jonathan D.
; APPLICANT: Skeiky, Yasir A. W.
; APPLICANT: Fanger, Gary R.
; APPLICANT: Vedvick Thomas S.
; APPLICANT: Carter, Darrick
; TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY AND DIAGNOSIS
; TITLE OF INVENTION: OF COLON CANCER AND METHODS FOR THEIR USE
; FILE REFERENCE: 210121.471C14
; CURRENT APPLICATION NUMBER: US/10/025,380
; CURRENT FILING DATE: 2001-12-19
; NUMBER OF SEQ ID NOS: 1129
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 1105
; LENGTH: 1917
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-025-380-1105

Query Match 2.8%; Score 215.6; DB 14; Length 1917;
Best Local Similarity 65.6%; Pred. No. 4.4e-54;
Matches 449; Conservative 0; Mismatches 204; Indels 31; Gaps 8;

```
Qy       6999 AGGTATTACTACAAACGGGAGATCCTGGAACGGGTGGATGGCCGACGGCTCGTCTACAAG 7058
Db       1121 AGGTACTACTACAAACGGGAGATCCTGGAACGGGTGGATGGCCGGCGACTCGTCTACAAG 1180

Qy       7059 TTTGGCAAGAACTCTAGTGGCTGGAAGGAAGAAGAGGTTGGAGAGAGTCGGAATTAAGGA 7118
Db       1181 TTTGGCAAAAACTCAAGCGGCTGGAAGGAGGAAGAGGTTCTCCAGAGTCGGAACTGAGGG 1240

Qy       7119 TCGGGGCTGGACCCAGGACCTGACTCAGGCATGAACTCCAGAACTGAAGCCTTCCTGGAA 7178
Db       1241 TTGGAACTATACCCGGGACCAAACTCACGGACCACTCGAGGCCTGCAAACCTTCCTGGGA 1300

Qy       7179 GGACAGGCAGGCCTGACGGCCCCCTTAACATGGATGTGTTCCCTGTGTTGCTGTAGAGAG 7238
```

```
Db       1301 GGACAGGCAGGCCAGATGG-CCCCTCCACTGGGGAATGCTCCCAGCTGTGCTGTGGAGAG 1359

Qy       7239 GAAGAACCTGTTGGGCGTGCCCTCTGC---AGTCTCCTCAAGTGCAGCCTTTGGCCTC-- 7293
Db       1360 AAGCTGATGTTTTGGTGTATTGTCAGCCATCGTCCTGGGACTCGGAGACTATGGCCTCGC 1419

Qy       7294 --TCTCCTCGCCCTCTTGGAATTACAAGCCCCGGGTTTGAACCAACTTGTTCGA------ 7345
Db       1420 CTCCCCACCCTCCTCTTGGAATTACAAGCCCTGGGGTTTGAAGCTGACTTTATAGCTGCA 1479

Qy       7346 --------TAACTCTTCCAGCTGTGATTCCAGTTCCCTCCCGTCCCAACATGGACTGCAA 7397
Db       1480 AGTGTATCTCCTTTTATCTGGTGCCTCCTCAAACCCAGTCTCAGACACTAAATGCAGACA 1539

Qy       7398 ATGAGACCCACCTGCAGATGCCTGGCCTCAGCCAAGGAGGCTGGGGAGACTGTGGCAGGA 7457
Db       1540 ACACCTTCCTCCTGCAGACACCTGGACTGAGCCAAGGAGGCCTGGG--GAGGCCCTAGGG 1597

Qy       7458 GACTGCAGGGACGGAGGGGACAGGGTTGTGTCCTCGG----TACTTCCTGGACTGCCTTC 7513
Db       1598 GAGCACCGTGATGGAGAGGACAGAGCAGGGGCTCCAGCACCTTCTTTCTGGACTGGCGTT 1657

Qy       7514 CACCTCTTTGCTCAGTACTCAGGCTCCACAGACGGGGGTCGGATCA-TCCCTAATTTATG 7572
Db       1658 CACCTCCCTGCTCAGTGCTTGGGCTCCACGGGCAGGGGTCAGAGCACTCCCTAATTTATG 1717

Qy       7573 TGC--TATAAATATTCCAGGTGTATATAGAGAGCTATTTTTTCTAAAGCATTTCCCCTCC 7630
Db       1718 TGCTATATAAATATGTCAGATGTACATAGAGATCTATTTTTTCTAAAACATTCCCCTCCC 1777

Qy       7631 CTGCTCTTCTCCACTGAGTGCTGG 7654
Db       1778 CACTCCTCTCCCACAGAGTGCTGG 1801
```

RESULT 8
US-10-264-049-756
; Sequence 756, Application US/10264049
; Publication No. US20040005579A1
; GENERAL INFORMATION:
; APPLICANT: Birse et al.
; TITLE OF INVENTION: Nucleic Acids, Proteins, and Antibodies
; FILE REFERENCE: PA133P1
; CURRENT APPLICATION NUMBER: US/10/264,049
; CURRENT FILING DATE: 2002-10-04
; PRIOR APPLICATION NUMBER: PCT/US01/18569
; PRIOR FILING DATE: 2001-06-07
; PRIOR APPLICATION NUMBER: US 60/209,467
; PRIOR FILING DATE: 2000-06-07
; NUMBER OF SEQ ID NOS: 4360
; SOFTWARE: PatentIn Ver. 3.1
; SEQ ID NO 756
; LENGTH: 1956
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-264-049-756

Query Match 2.8%; Score 215.6; DB 12; Length 1956;
Best Local Similarity 65.6%; Pred. No. 4.4e-54;
Matches 449; Conservative 0; Mismatches 204; Indels 31; Gaps 8;

```
Qy       6999 AGGTATTACTACAAACGGGAGATCCTGGAACGGGTGGATGGCCGACGGCTCGTCTACAAG 7058
Db       1160 AGGTACTACTACAAACGGGAGATCCTGGAACGGGTGGATGGCCGGCGACTCGTCTACAAG 1219

Qy       7059 TTTGGCAAGAACTCTAGTGGCTGGAAGGAAGAAGAGGTTGGAGAGAGTCGGAATTAAGGA 7118
Db       1220 TTTGGCAAAAACTCAAGCGGCTGGAAGGAGGAAGAGGTTCTCCAGAGTCGGAACTGAGGG 1279

Qy       7119 TCGGGGCTGGACCCAGGACCTGACTCAGGCATGAACTCCAGAACTGAAGCCTTCCTGGAA 7178
Db       1280 TTGGAACTATACCCGGGACCAAACTCACGGACCACTCGAGGCCTGCAAACCTTCCTGGGA 1339
```

```
Qy       7179 GGACAGGCAGGCCTGACGGCCCCCTTAACATGGATGTGTTCCCTGTGTTGCTGTAGAGAG 7238
             |||||||||||||  ||  ||  |||||   ||   ||   ||||  |   ||||||  |||||
Db       1340 GGACAGGCAGGCCAGATGG-CCCCTCCACTGGGGAATGCTCCCAGCTGTGCTGTGGAGAG 1398

Qy       7239 GAAGAACCTGTTGGGCGTGCCCTCTGC---AGTCTCCTCAAGTGCAGCCTTTGGCCTC-- 7293
               |     ||  ||  ||    ||  ||     |||      |   |  ||  ||  |||||||
Db       1399 AAGCTGATGTTTTGGTGTATTGTCAGCCATCGTCCTGGGACTCGGAGACTATGGCCTCGC 1458

Qy       7294 --TCTCCTCGCCCTCTTGGAATTACAAGCCCCGGGTTTGAACCAACTTGTTCGA------ 7345
                | |  |  ||||||||||||||||||||||  |||  ||   |          ||   |
Db       1459 CTCCCCACCCTCCTCTTGGAATTACAAGCCCTGGGGTTTGAAGCTGACTTTATAGCTGCA 1518

Qy       7346 --------TAACTCTTCCAGCTGTGATTCCAGTTCCCTCCCGTCCCAACATGGACTGCAA 7397
                     |   | |  |  | ||       ||   ||   |      ||  |    | |  |
Db       1519 AGTGTATCTCCTTTTATCTGGTGCCTCCTCAAACCCAGTCTCAGACACTAAATGCAGACA 1578

Qy       7398 ATGAGACCCACCTGCAGATGCCTGGCCTCAGCCAAGGAGGCTGGGGAGACTGTGGCAGGA 7457
              |      || ||||||||  |||||  ||  ||||||||||||  |||      |    |||
Db       1579 ACACCTTCCTCCTGCAGACACCTGGACTGAGCCAAGGAGGCCTGGG--GAGGCCCTAGGG 1636

Qy       7458 GACTGCAGGGACGGAGGGGACAGGGTTGTGTCCTCGG----TACTTCCTGGACTGCCTTC 7513
              ||   | | ||  |||| ||||||  |  | |  | |    | ||| ||||||||  | |
Db       1637 GAGCACCGTGATGGAGAGGACAGAGCAGGGGCTCCAGCACCTTCTTTCTGGACTGGCGTT 1696

Qy       7514 CACCTCTTTGCTCAGTACTCAGGCTCCACAGACGGGGGTCGGATCA-TCCCTAATTTATG 7572
              ||||||  ||||||||  ||  ||||||||  | |  ||||||  ||  ||  ||||||||||||
Db       1697 CACCTCCCTGCTCAGTGCTTGGGCTCCACGGGCAGGGGTCAGAGCACTCCCTAATTTATG 1756

Qy       7573 TGC--TATAAATATTCCAGGTGTATATAGAGAGCTATTTTTTCTAAAGCATTTCCCCTCC 7630
              |||  |||||||||  |||  ||||  |||||||  ||||||||||||||  ||||  |||  ||
Db       1757 TGCTATATAAATATGTCAGATGTACATAGAGATCTATTTTTTCTAAAACATTCCCCTCCC 1816

Qy       7631 CTGCTCTTCTCCACTGAGTGCTGG 7654
              |    ||   ||||  |||||||||
Db       1817 CACTCCTCTCCCACAGAGTGCTGG 1840
```

RESULT 9
US-09-925-301-207
; Sequence 207, Application US/09925301
; Patent No. US20020052308A1
; GENERAL INFORMATION:
; APPLICANT: Rosen et al.
; TITLE OF INVENTION: Nucleic Acids, Proteins and Antibodies
; FILE REFERENCE: PA106
; CURRENT APPLICATION NUMBER: US/09/925,301
; CURRENT FILING DATE: 2001-08-10
; PRIOR APPLICATION NUMBER: PCT/US00/05882
; PRIOR FILING DATE: 2000-03-08
; PRIOR APPLICATION NUMBER: 60/124,270
; PRIOR FILING DATE: 1999-03-12
; NUMBER OF SEQ ID NOS: 1694
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 207
; LENGTH: 1996
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-925-301-207

Query Match 2.8%; Score 215.6; DB 9; Length 1996;
Best Local Similarity 65.6%; Pred. No. 4.5e-54;
Matches 449; Conservative 0; Mismatches 204; Indels 31; Gaps 8;

```
Qy       6999 AGGTATTACTACAAACGGGAGATCCTGGAACGGGTGGATGGCCGACGGCTCGTCTACAAG 7058
              |||||  ||||||||||||||||||||||||||||||||||||||||||  ||||||||||||
Db       1140 AGGTACTACTACAAACGGGAGATCCTGGAACGGGTGGATGGCCGGCGACTCGTCTACAAG 1199

Qy       7059 TTTGGCAAGAACTCTAGTGGCTGGAAGGAAGAAGAGGTTGGAGAGAGTCGGAATTAAGGA 7118
              ||||||||  |||||  ||  ||||||||||  |||||||||     ||||||||||  | |||
Db       1200 TTTGGCAAAAACTCAAGCGGCTGGAAGGAGGAAGAGGTTCTCCAGAGTCGGAACTGAGGG 1259

Qy       7119 TCGGGGCTGGACCCAGGACCTGACTCAGGCATGAACTCCAGAACTGAAGCCTTCCTGGAA 7178
```

```
Db       1260 TTGGAACTATACCCGGGACCAAACTCACGGACCACTCGAGGCCTGCAAACCTTCCTGGGA 1319

Qy       7179 GGACAGGCAGGCCTGACGGCCCCCTTAACATGGATGTGTTCCCTGTGTTGCTGTAGAGAG 7238
              |||||||||||||  ||  ||  |||||   ||   ||   ||||  |   ||||||  |||||
Db       1320 GGACAGGCAGGCCAGATGG-CCCCTCCACTGGGGAATGCTCCCAGCTGTGCTGTGGAGAG 1378

Qy       7239 GAAGAACCTGTTGGGCGTGCCCTCTGC---AGTCTCCTCAAGTGCAGCCTTTGGCCTC-- 7293
               |     ||  ||  ||    ||  ||     |||      |   |  ||  ||  |||||||
Db       1379 AAGCTGATGTTTTGGTGTATTGTCAGCCATCGTCCTGGGACTCGGAGACTATGGCCTCGC 1438

Qy       7294 --TCTCCTCGCCCTCTTGGAATTACAAGCCCCGGGTTTGAACCAACTTGTTCGA------ 7345
                | |  |  ||||||||||||||||||||||  |||  ||   |          ||   |
Db       1439 CTCCCCACCCTCCTCTTGGAATTACAAGCCCTGGGGTTTGAAGCTGACTTTATAGCTGCA 1498

Qy       7346 --------TAACTCTTCCAGCTGTGATTCCAGTTCCCTCCCGTCCCAACATGGACTGCAA 7397
                     |   | |  |  | ||       ||   ||   |      ||  |    | |  |
Db       1499 AGTGTATCTCCTTTTATCTGGTGCCTCCTCAAACCCAGTCTCAGACACTAAATGCAGACA 1558

Qy       7398 ATGAGACCCACCTGCAGATGCCTGGCCTCAGCCAAGGAGGCTGGGGAGACTGTGGCAGGA 7457
              |      || ||||||||  |||||  ||  ||||||||||||  |||      |    |||
Db       1559 ACACCTTCCTCCTGCAGACACCTGGACTGAGCCAAGGAGGCCTGGG--GAGGCCCTAGGG 1616

Qy       7458 GACTGCAGGGACGGAGGGGACAGGGTTGTGTCCTCGG----TACTTCCTGGACTGCCTTC 7513
              ||   | | ||  |||| ||||||  |  | |  | |    | ||| ||||||||  | |
Db       1617 GAGCACCGTGATGGAGAGGACAGAGCAGGGGCTCCAGCACCTTCTTTCTGGACTGGCGTT 1676

Qy       7514 CACCTCTTTGCTCAGTACTCAGGCTCCACAGACGGGGGTCGGATCA-TCCCTAATTTATG 7572
              ||||||  ||||||||  ||  ||||||||  | |  ||||||  ||  ||  ||||||||||||
Db       1677 CACCTCCCTGCTCAGTGCTTGGGCTCCACGGGCAGGGGTCAGAGCACTCCCTAATTTATG 1736

Qy       7573 TGC--TATAAATATTCCAGGTGTATATAGAGAGCTATTTTTTCTAAAGCATTTCCCCTCC 7630
              |||  |||||||||  |||  ||||  |||||||  ||||||||||||||  ||||  |||  ||
Db       1737 TGCTATATAAATATGTCAGATGTACATAGAGATCTATTTTTTCTAAAACATTCCCCTCCC 1796

Qy       7631 CTGCTCTTCTCCACTGAGTGCTGG 7654
              |    ||   ||||  |||||||||
Db       1797 CACTCCTCTCCCACAGAGTGCTGG 1820
```

RESULT 10
US-10-131-410-64
; Sequence 64, Application US/10131410
; Publication No. US20030235915A1
; GENERAL INFORMATION:
; APPLICANT: SPECHT, THOMAS
; APPLICANT: HINZMANN, BERND
; APPLICANT: SCHMITT, ARMIN
; APPLICANT: PILARSKY, CHRISTIAN
; APPLICANT: DAHL, EDGAR
; APPLICANT: ROSENTHAL, ANDRE
; TITLE OF INVENTION: HUMAN NUCLEIC ACID SEQUENCES FROM TISSUE OF BREAST
; TITLE OF INVENTION: TUMORS
; FILE REFERENCE: SCH-1763
; CURRENT APPLICATION NUMBER: US/10/131,410
; CURRENT FILING DATE: 2002-04-25
; PRIOR APPLICATION NUMBER: 09/646,673
; PRIOR FILING DATE: 2000-09-20
; PRIOR APPLICATION NUMBER: PCT/DE99/00908
; PRIOR FILING DATE: 1999-03-19
; NUMBER OF SEQ ID NOS: 202
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 64
; LENGTH: 2269
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-131-410-64

Query Match 2.8%; Score 215.6; DB 12; Length 2269;
Best Local Similarity 65.6%; Pred. No. 4.9e-54;
Matches 449; Conservative 0; Mismatches 204; Indels 31; Gaps 8;

```
Qy       6999 AGGTATTACTACAAACGGGAGATCCTGGAACGGGTGGATGGCCGACGGCTCGTCTACAAG 7058
```

```
                 ||||| |||||||||||||||||||||||||||||||||||||||||| || ||||||||||||
Db        850 AGGTACTACTACAAACGGGAGATCCTGGAACGGGTGGATGGCCGGCGACTCGTCTACAAG 909

Qy       7059 TTTGGCAAGAACTCTAGTGGCTGGAAGGAAGAAGAGGTTGGAGAGAGTCGGAATTAAGGA 7118
                 |||||||| ||||| || |||||||||| |||||||||    |||||||||| | |||
Db        910 TTTGGCAAAAACTCAAGCGGCTGGAAGGAGGAAGAGGTTCTCCAGAGTCGGAACTGAGGG 969

Qy       7119 TCGGGGCTGGACCCAGGACCTGACTCAGGCATGAACTCCAGAACTGAAGCCTTCCTGGAA 7178
                 | ||  ||  |||| |||||  |||| | |  |       |      || |||||||| |
Db        970 TTGGAACTATACCCGGGACCAAACTCACGGACCACTCGAGGCCTGCAAACCTTCCTGGGA 1029

Qy       7179 GGACAGGCAGGCCTGACGGCCCCCTTAACATGGATGTGTTCCCTGTGTTGCTGTAGAGAG 7238
                 |||||||||||||  || || |||||  ||  ||  || |||| |   |||||| |||||
Db       1030 GGACAGGCAGGCCAGATGG-CCCCTCCACTGGGGAATGCTCCCAGCTGTGCTGTGGAGAG 1088

Qy       7239 GAAGAACCTGTTGGGCGTGCCCTCTGC---AGTCTCCTCAAGTGCAGCCTTTGGCCTC-- 7293
                 |          || || ||    || ||    |||      |  | || || |||||||
Db       1089 AAGCTGATGTTTTGGTGTATTGTCAGCCATCGTCCTGGGACTCGGAGACTATGGCCTCGC 1148

Qy       7294 --TCTCCTCGCCCTCTTGGAATTACAAGCCCCGGGTTTGAACCAACTTGTTCGA------ 7345
                 | |  |  |||||||||||||||||||| ||| ||  |      ||  |
Db       1149 CTCCCCACCCTCCTCTTGGAATTACAAGCCCTGGGGTTTGAAGCTGACTTTATAGCTGCA 1208

Qy       7346 --------TAACTCTTCCAGCTGTGATTCCAGTTCCCTCCCGTCCCAACATGGACTGCAA 7397
                       | | | | | ||     ||  ||  |    ||  |   | | |
Db       1209 AGTGTATCTCCTTTTATCTGGTGCCTCCTCAAACCCAGTCTCAGACACTAAATGCAGACA 1268

Qy       7398 ATGAGACCCACCTGCAGATGCCTGGCCTCAGCCAAGGAGGCTGGGGAGACTGTGGCAGGA 7457
                 |      || ||||||||  |||||  || ||||||||||||  |||      |   |||
Db       1269 ACACCTTCCTCCTGCAGACACCTGGACTGAGCCAAGGAGGCCTGGG--GAGGCCCTAGGG 1326

Qy       7458 GACTGCAGGGACGGAGGGGACAGGGTTGTGTCCTCGG----TACTTCCTGGACTGCCTTC 7513
                 ||   | | || |||| |||||  |  | | |  |    | ||| ||||||||  | |
Db       1327 GAGCACCGTGATGGAGAGGACAGAGCAGGGGCTCCAGCACCTTCTTTCTGGACTGGCGTT 1386

Qy       7514 CACCTCTTTGCTCAGTACTCAGGCTCCACAGACGGGGGTCGGATCA-TCCCTAATTTATG 7572
                 ||||||  |||||||| ||  |||||||| | ||||||  || || ||||||||||||
Db       1387 CACCTCCCTGCTCAGTGCTTGGGCTCCACGGGCAGGGGTCAGAGCACTCCCTAATTTATG 1446

Qy       7573 TGC--TATAAATATTCCAGGTGTATATAGAGAGCTATTTTTTCTAAAGCATTTCCCCTCC 7630
                 |||  |||||||||  ||| |||| |||||||| ||||||||||||| |||| |||  ||
Db       1447 TGCTATATAAATATGTCAGATGTACATAGAGATCTATTTTTTCTAAAACATTCCCCTCCC 1506

Qy       7631 CTGCTCTTCTCCACTGAGTGCTGG 7654
                 |    ||   |||| |||||||||
Db       1507 CACTCCTCTCCCACAGAGTGCTGG 1530
```

```
RESULT 11
US-10-292-798-1601/c
; Sequence 1601, Application US/10292798
; Publication No. US20030235833A1
; GENERAL INFORMATION:
;  APPLICANT: SUWA, MAKIKO
;  APPLICANT:  ASAI, KIYOSHI
;  APPLICANT:  AKIYAMA, YUTAKA
;  APPLICANT:  ABURATANI, HIROYUKI
;  TITLE OF INVENTION: GUANOSINE TRIPHOSPHATE-BINDING PROTEIN COUPLED RECEPTORS
;  FILE REFERENCE: 084335/166
;  CURRENT APPLICATION NUMBER: US/10/292,798
;  CURRENT FILING DATE:  2002-11-13
;  PRIOR APPLICATION NUMBER: 10/017,161
;  PRIOR FILING DATE: 2001-12-18
;  PRIOR APPLICATION NUMBER: JP 2001-246789
;  PRIOR FILING DATE: 2001-06-18
;  NUMBER OF SEQ ID NOS: 2070
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 1601
;   LENGTH: 1435
;   TYPE: DNA
;   ORGANISM: Homo sapiens
;   FEATURE:
;   LOCATION: source
;   FEATURE:
;   LOCATION: (1)..(1435)
;   FEATURE:
;   NAME/KEY: CDS
;   LOCATION: (201)..(1235)
;   FEATURE:
;   NAME/KEY: modified_base
;   LOCATION: (1040)..(1139)
;   OTHER INFORMATION: a, t, c, g, unknown or other
;   FEATURE:
;   NAME/KEY: modified_base
;   LOCATION: (1145)..(1145)
;   OTHER INFORMATION: a, t, c, g, unknown or other
US-10-292-798-1601

  Query Match             2.4%;  Score 185.8;  DB 12;  Length 1435;
  Best Local Similarity   79.4%;  Pred. No. 4.7e-45;
  Matches  220;  Conservative    0;  Mismatches   57;  Indels    0;  Gaps    0;

Qy       6181 TTGGGATAGGAGAGGCCAGGTCGCCTAGAGGAGAGGGGCACCCCAGACTGATAACTGAGG 6240
                 | |||   | || |     | | | |  |||||||   |  ||  | ||||||
Db        442 TGGGGCGGGCAGGGCTGGCTGCCCTTGGGTGAGAGGGGACACTTGGATGGCAAACTGATG 383

Qy       6241 AAATCTTCCCTTGTAGCCCCCAGAGGTACTCACCTGTGGGAGTTTATCCGAGACATCCTA 6300
                   |  || ||||| ||| |||||||| || ||||||||||||||| ||||| ||||||||
Db        382 GAGGCTGGCCTTGCAGCGCCCAGAGGCACCCACCTGTGGGAGTTCATCCGGGACATCCTC 323

Qy       6301 ATCCACCCCGAGCTCAACGAAGGCCTCATGAAGTGGGAGAACCGGCACGAGGGTGTGTTC 6360
                 |||||||| |||||||||| |||||||||||||||||||| ||||| || || || |||
Db        322 ATCCACCCGGAGCTCAACGAGGGCCTCATGAAGTGGGAGAATCGGCATGAAGGCGTCTTC 263

Qy       6361 AAGTTTCTTCGCTCAGAGGCCGTGGCCCAACTCTGGGGCCAGAAGAAGAAGAACAGCAAC 6420
                 ||||| || ||||| ||||| |||||||||| |||||||| ||||| ||||||||||||
Db        262 AAGTTCCTGCGCTCCGAGGCTGTGGCCCAACTATGGGGCCAAAAGAAAAAGAACAGCAAC 203

Qy       6421 ATGACCTATGAGAAGCTGAGCCGAGCCATGAGGTGAG 6457
                 |||||||| |||||||||||||| ||||||||||||
Db        202 ATGACCTACGAGAAGCTGAGCCGGGCCATGAGGTGAG 166
```

```
RESULT 12
US-10-017-161-1953/c
; Sequence 1953, Application US/10017161
; Publication No. US20030143668A1
; GENERAL INFORMATION:
;  APPLICANT: SUWA, MAKIKO
;  APPLICANT:  ASAI, KIYOSHI
;  APPLICANT:  AKIYAMA, YUTAKA
;  APPLICANT:  ABURATANI, HIROYUKI
;  TITLE OF INVENTION: NOVEL G PROTEIN-COUPLED RECEPTORS
;  FILE REFERENCE: 084335/0152
;  CURRENT APPLICATION NUMBER: US/10/017,161
;  CURRENT FILING DATE:  2002-12-18
;  PRIOR APPLICATION NUMBER: JP 2001/246789
;  PRIOR FILING DATE: 2001-06-18
;  NUMBER OF SEQ ID NOS: 2430
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 1953
;   LENGTH: 1435
;   TYPE: DNA
;   ORGANISM: Homo sapiens
;   FEATURE:
;   NAME/KEY: source
;   LOCATION: (1)..(1435)
;   FEATURE:
;   NAME/KEY: CDS
;   LOCATION: (201)..(1235)
;   FEATURE:
;   NAME/KEY: modified_base
;   LOCATION: (1040)..(1139)
;   OTHER INFORMATION: a, t, c, g, unknown or other
;   FEATURE:
;   NAME/KEY: modified_base
```

```
;   LOCATION: (1145)
;   OTHER INFORMATION: a, t, c, g, unknown or other
US-10-017-161-1953

  Query Match             2.4%;  Score 185.8;  DB 13;  Length 1435;
  Best Local Similarity   79.4%;  Pred. No. 4.7e-45;
  Matches  220;  Conservative    0;  Mismatches   57;  Indels    0;  Gaps    0;

Qy       6181 TTGGGATAGGAGAGGCCAGGTCGCCTAGAGGAGAGGGGCACCCCAGACTGATAACTGAGG 6240
              | |||   | ||  |     |  | |  |  |||||||  |   ||  |  ||||||  |
Db        442 TGGGGCGGGCAGGGCTGGCTGCCCTTGGGTGAGAGGGGACACTTGGATGGCAAACTGATG 383

Qy       6241 AAATCTTCCCTTGTAGCCCCCAGAGGTACTCACCTGTGGGAGTTTATCCGAGACATCCTA 6300
              |   ||  |||||  |||  ||||||||  ||  ||||||||||||||  |||||  |||||||||
Db        382 GAGGCTGGCCTTGCAGCGCCCAGAGGCACCCACCTGTGGGAGTTCATCCGGGACATCCTC 323

Qy       6301 ATCCACCCCGAGCTCAACGAAGGCCTCATGAAGTGGGAGAACCGGCACGAGGGTGTGTTC 6360
              ||||||||  ||||||||||| ||||||||||||||||||||||  |||||  ||  ||  |||
Db        322 ATCCACCCGGAGCTCAACGAGGGCCTCATGAAGTGGGAGAATCGGCATGAAGGCGTCTTC 263

Qy       6361 AAGTTTCTTCGCTCAGAGGCCGTGGCCCAACTCTGGGGCCAGAAGAAGAAGAACAGCAAC 6420
              |||||  ||  |||||  |||||  ||||||||||  ||||||||  |||||  ||||||||||||
Db        262 AAGTTCCTGCGCTCCGAGGCTGTGGCCCAACTATGGGGCCAAAAGAAAAAGAACAGCAAC 203

Qy       6421 ATGACCTATGAGAAGCTGAGCCGAGCCATGAGGTGAG 6457
              ||||||||  ||||||||||||||  ||||||||||||
Db        202 ATGACCTACGAGAAGCTGAGCCGGGCCATGAGGTGAG 166


RESULT 13
US-09-922-217-853/c
; Sequence 853, Application US/09922217
; Patent No. US20020076414A1
; GENERAL INFORMATION:
;  APPLICANT: Xu, Jiangchun
;  APPLICANT:  Lodes, Michael J.
;  APPLICANT:  Secrist, Heather
;  APPLICANT:  Benson, Darin R.
;  APPLICANT:  Meagher, Madeleine Joy
;  APPLICANT:  Stolk, John A.
;  APPLICANT:  Wang, Tongtong
;  APPLICANT:  Jiang, Yuqiu
;  APPLICANT:  Smith, Carole Lynn
;  APPLICANT:  King, Gordon E.
;  APPLICANT:  Wang, Aijun
;  APPLICANT:  Clapper, Jonathan D.
;  TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY AND DIAGNOSIS
;  TITLE OF INVENTION:  OF COLON CANCER AND METHODS FOR THEIR USE
;  FILE REFERENCE: 210121.471C13
;  CURRENT APPLICATION NUMBER: US/09/922,217
;  CURRENT FILING DATE:  2001-08-03
;  NUMBER OF SEQ ID NOS: 1124
;  SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 853
;   LENGTH: 626
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-922-217-853

  Query Match             2.3%;  Score 176.2;  DB 9;  Length 626;
  Best Local Similarity   85.6%;  Pred. No. 2.3e-42;
  Matches  196;  Conservative    0;  Mismatches   33;  Indels    0;  Gaps    0;

Qy       4147 TGCAGAGAAGGCAAGCTGGACTAGCGAGCGGCCCCAGTTCTGGTCGAAGACCCAGGTTCT 4206
              | ||||||||||  ||||||    | ||  | ||||||||||||||||||||  |||||||
Db        622 TACAGAGAAGGCCAGCTGGTTGGGGGAACAGCCCCAGTTCTGGTCGAAGACGCAGGTTCT 563

Qy       4207 GGAGTGGATCAGCTACCAAGTGGAGAAGAACAAGTATGACGCCAGCTCCATCGACTTCTC 4266
              |||  ||||||||||||||||||||||||||||||||||||  |||||  |||  ||||  |||||||||
Db        562 GGACTGGATCAGCTACCAAGTGGAGAAGAACAAGTACGACGCAAGCGCCATTGACTTCTC 503

Qy       4267 CCGCTGCAACATGGACGGAGCCACCCTCTGCAGCTGTGCGCTGGAGGAGCTGCGGCTAGT 4326
                ||  ||  |||||||  ||  ||||||||||||  |||||  ||  ||||||||||  ||  ||

Db        502 ACGATGTGACATGGATGGCGCCACCCTCTGCAATTGTGCCCTTGAGGAGCTGCGTCTGGT 443

Qy       4327 CTTTGGACCTCTGGGAGACCAGCTCCATGCCCAGCTTCGGGACCTCAGT 4375
              ||||||  ||||||||  |||||  ||||||||||||||  ||  |||||||  |
Db        442 CTTTGGGCCTCTGGGGGACCAACTCCATGCCCAGCTGCGAGACCTCACT 394


RESULT 14
US-09-833-263-853/c
; Sequence 853, Application US/09833263
; Patent No. US20020110547A1
; GENERAL INFORMATION:
;  APPLICANT: Wang, Aijun
;  APPLICANT:  Clapper, Jonathan D.
;  APPLICANT:  Stolk, John A.
;  APPLICANT:  Meagher, Madeleine J.
;  TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY AND
;  TITLE OF INVENTION:  DIAGNOSIS OF COLON CANCER AND METHODS FOR THEIR USE
;  FILE REFERENCE: 210121.471C12
;  CURRENT APPLICATION NUMBER: US/09/833,263
;  CURRENT FILING DATE:  2001-04-10
;  NUMBER OF SEQ ID NOS: 1093
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 853
;   LENGTH: 626
;   TYPE: DNA
;   ORGANISM: Homo sapien
US-09-833-263-853

  Query Match             2.3%;  Score 176.2;  DB 10;  Length 626;
  Best Local Similarity   85.6%;  Pred. No. 2.3e-42;
  Matches  196;  Conservative    0;  Mismatches   33;  Indels    0;  Gaps    0;

Qy       4147 TGCAGAGAAGGCAAGCTGGACTAGCGAGCGGCCCCAGTTCTGGTCGAAGACCCAGGTTCT 4206
              | ||||||||||  ||||||    | ||  | ||||||||||||||||||||  |||||||
Db        622 TACAGAGAAGGCCAGCTGGTTGGGGGAACAGCCCCAGTTCTGGTCGAAGACGCAGGTTCT 563

Qy       4207 GGAGTGGATCAGCTACCAAGTGGAGAAGAACAAGTATGACGCCAGCTCCATCGACTTCTC 4266
              |||  ||||||||||||||||||||||||||||||||||||  |||||  |||  ||||  |||||||||
Db        562 GGACTGGATCAGCTACCAAGTGGAGAAGAACAAGTACGACGCAAGCGCCATTGACTTCTC 503

Qy       4267 CCGCTGCAACATGGACGGAGCCACCCTCTGCAGCTGTGCGCTGGAGGAGCTGCGGCTAGT 4326
                ||  ||  |||||||  ||  ||||||||||||  |||||  ||  ||||||||||  ||  ||

Db        502 ACGATGTGACATGGATGGCGCCACCCTCTGCAATTGTGCCCTTGAGGAGCTGCGTCTGGT 443

Qy       4327 CTTTGGACCTCTGGGAGACCAGCTCCATGCCCAGCTTCGGGACCTCAGT 4375
              ||||||  ||||||||  |||||  ||||||||||||||  ||  |||||||  |
Db        442 CTTTGGGCCTCTGGGGGACCAACTCCATGCCCAGCTGCGAGACCTCACT 394


RESULT 15
US-10-025-380-853/c
; Sequence 853, Application US/10025380
; Publication No. US20020182191A1
; GENERAL INFORMATION:
;  APPLICANT: Xu, Jiangchun
;  APPLICANT:  Lodes, Michael J.
;  APPLICANT:  Secrist, Heather
;  APPLICANT:  Benson, Darin R.
;  APPLICANT:  Meagher, Madeleine Joy
;  APPLICANT:  Stolk, John A.
;  APPLICANT:  Wang, Tongtong
;  APPLICANT:  Jiang, Yuqiu
;  APPLICANT:  Smith, Carole L.
;  APPLICANT:  King, Gordon E.
;  APPLICANT:  Wang, Aijun
;  APPLICANT:  Clapper, Jonathan D.
;  APPLICANT:  Skeiky, Yasir A. W.
;  APPLICANT:  Fanger, Gary R.
;  APPLICANT:  Vedvick Thomas S.
;  APPLICANT:  Carter, Darrick
;  TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY AND DIAGNOSIS
;  TITLE OF INVENTION:  OF COLON CANCER AND METHODS FOR THEIR USE
```

```
;  FILE REFERENCE: 210121.471C14
;  CURRENT APPLICATION NUMBER: US/10/025,380
;  CURRENT FILING DATE:  2001-12-19
;  NUMBER OF SEQ ID NOS: 1129
;  SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 853
;   LENGTH: 626
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-10-025-380-853

  Query Match             2.3%;  Score 176.2;  DB 14;  Length 626;
  Best Local Similarity   85.6%;  Pred. No. 2.3e-42;
  Matches  196;  Conservative    0;  Mismatches   33;  Indels    0;  Gaps    0;

Qy       4147 TGCAGAGAAGGCAAGCTGGACTAGCGAGCGGCCCCAGTTCTGGTCGAAGACCCAGGTTCT 4206
              | |||||||||| ||||||    | || | ||||||||||||||||||||| ||||||||
Db        622 TACAGAGAAGGCCAGCTGGTTGGGGGAACAGCCCCAGTTCTGGTCGAAGACGCAGGTTCT 563

Qy       4207 GGAGTGGATCAGCTACCAAGTGGAGAAGAACAAGTATGACGCCAGCTCCATCGACTTCTC 4266
              ||| ||||||||||||||||||||||||||||||| ||||| ||| |||| ||||||||
Db        562 GGACTGGATCAGCTACCAAGTGGAGAAGAACAAGTACGACGCAAGCGCCATTGACTTCTC 503

Qy       4267 CCGCTGCAACATGGACGGAGCCACCCTCTGCAGCTGTGCGCTGGAGGAGCTGCGGCTAGT 4326
              || ||  ||||||| || |||||||||||||  ||||| || |||||||||| || ||
Db        502 ACGATGTGACATGGATGGCGCCACCCTCTGCAATTGTGCCCTTGAGGAGCTGCGTCTGGT 443

Qy       4327 CTTTGGACCTCTGGGAGACCAGCTCCATGCCCAGCTTCGGGACCTCAGT 4375
              |||||| |||||||| ||||| |||||||||||||| || ||||||| |
Db        442 CTTTGGGCCTCTGGGGGACCAACTCCATGCCCAGCTGCGAGACCTCACT 394


Search completed: February 13, 2004, 11:48:40
Job time : 2738.91 secs
```

GenCore version 5.1.6

OM nucleic - nucleic search, using sw model

Run on: February 13, 2004, 01:27:22 ; Search time 7.40341 Seconds
(without alignments)
10448.744 Million cell updates/sec

Title: US-08-978-217-14
Perfect score: 21
Sequence: 1 GTACCTCATGGCCCGGCTCAG 21

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 2449703 seqs, 1841816367 residues

Total number of hits satisfying chosen parameters: 4899406

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Published_Applications_NA:*
1: /cgn2_6/ptodata/1/pubpna/US07_PUBCOMB.seq:*
2: /cgn2_6/ptodata/1/pubpna/PCT_NEW_PUB.seq:*
3: /cgn2_6/ptodata/1/pubpna/US06_NEW_PUB.seq:*
4: /cgn2_6/ptodata/1/pubpna/US06_PUBCOMB.seq:*
5: /cgn2_6/ptodata/1/pubpna/US07_NEW_PUB.seq:*
6: /cgn2_6/ptodata/1/pubpna/PCTUS_PUBCOMB.seq:*
7: /cgn2_6/ptodata/1/pubpna/US08_NEW_PUB.seq:*
8: /cgn2_6/ptodata/1/pubpna/US08_PUBCOMB.seq:*
9: /cgn2_6/ptodata/1/pubpna/US09A_PUBCOMB.seq:*
10: /cgn2_6/ptodata/1/pubpna/US09B_PUBCOMB.seq:*
11: /cgn2_6/ptodata/1/pubpna/US09C_PUBCOMB.seq:*
12: /cgn2_6/ptodata/1/pubpna/US09_NEW_PUB.seq:*
13: /cgn2_6/ptodata/1/pubpna/US09_NEW_PUB.seq2:*
14: /cgn2_6/ptodata/1/pubpna/US10A_PUBCOMB.seq:*
15: /cgn2_6/ptodata/1/pubpna/US10B_PUBCOMB.seq:*
16: /cgn2_6/ptodata/1/pubpna/US10_NEW_PUB.seq:*
17: /cgn2_6/ptodata/1/pubpna/US60_NEW_PUB.seq:*
18: /cgn2_6/ptodata/1/pubpna/US60_PUBCOMB.seq:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
c 1	21	100.0	237	12	US-10-305-720-927	Sequence 927, App
c 2	21	100.0	451	10	US-09-998-598-32	Sequence 32, Appl
3	21	100.0	499	10	US-09-998-598-2290	Sequence 2290, Ap
c 4	21	100.0	502	9	US-09-604-287A-282	Sequence 282, App
c 5	21	100.0	502	10	US-09-339-338-282	Sequence 282, App
c 6	21	100.0	502	11	US-09-551-621-282	Sequence 282, App
c 7	21	100.0	502	13	US-10-124-805-282	Sequence 282, App
c 8	21	100.0	502	14	US-10-007-805-282	Sequence 282, App
c 9	21	100.0	502	15	US-10-076-622-282	Sequence 282, App
c 10	21	100.0	1907	15	US-10-097-340-74	Sequence 74, Appl
c 11	21	100.0	1915	10	US-09-964-824A-101	Sequence 101, App
c 12	21	100.0	1915	10	US-09-964-824A-563	Sequence 563, App
c 13	21	100.0	1915	10	US-09-880-107-3420	Sequence 3420, Ap
c 14	21	100.0	1915	10	US-09-967-768A-192	Sequence 192, App
c 15	21	100.0	1917	9	US-09-922-217-1105	Sequence 1105, Ap
c 16	21	100.0	1917	14	US-10-025-380-1105	Sequence 1105, Ap
c 17	21	100.0	1956	12	US-10-264-049-756	Sequence 756, App
c 18	21	100.0	1996	9	US-09-925-301-207	Sequence 207, App
c 19	21	100.0	2269	12	US-10-131-410-64	Sequence 64, Appl
c 20	19	90.5	275	15	US-10-060-036-3261	Sequence 3261, Ap
21	19	90.5	1435	12	US-10-292-798-1601	Sequence 1601, Ap
22	19	90.5	1435	13	US-10-017-161-1953	Sequence 1953, Ap
23	16.8	80.0	9025608	15	US-10-156-761-1	Sequence 1, Appli
c 24	16.4	78.1	619	12	US-10-291-172-388	Sequence 388, App
c 25	16.4	78.1	733	13	US-10-027-632-149050	Sequence 149050,
c 26	16.4	78.1	733	14	US-10-027-632-149050	Sequence 149050,
27	16.4	78.1	1851	15	US-10-156-761-5632	Sequence 5632, Ap
28	16.4	78.1	2094	13	US-10-027-632-109965	Sequence 109965,
29	16.4	78.1	2094	14	US-10-027-632-109965	Sequence 109965,
c 30	16.4	78.1	2212	10	US-09-919-497-25	Sequence 25, Appl
31	16.4	78.1	2450	12	US-10-388-934-599	Sequence 599, App
32	16.4	78.1	10322	10	US-09-764-868-1471	Sequence 1471, Ap
c 33	16.4	78.1	130427	15	US-10-175-523-87	Sequence 87, Appl
c 34	16.4	78.1	9025608	15	US-10-156-761-1	Sequence 1, Appli
c 35	16.2	77.1	366	15	US-10-187-267A-10	Sequence 10, Appl
36	16.2	77.1	402	12	US-10-242-535A-7139	Sequence 7139, Ap
37	16.2	77.1	470	12	US-10-242-535A-42404	Sequence 42404, A
c 38	16.2	77.1	624	15	US-10-156-761-7031	Sequence 7031, Ap
c 39	16.2	77.1	1639	13	US-10-247-671-46	Sequence 46, Appl
c 40	16.2	77.1	2266	12	US-10-388-263-201	Sequence 201, App
41	16.2	77.1	2939	14	US-10-044-090-350	Sequence 350, App
42	16.2	77.1	3121	12	US-10-439-249-6	Sequence 6, Appli
43	16.2	77.1	3121	13	US-09-866-034-6	Sequence 6, Appli
44	16.2	77.1	3121	13	US-10-210-951-65	Sequence 65, Appl
45	16.2	77.1	3121	13	US-10-211-884-65	Sequence 65, Appl

ALIGNMENTS

RESULT 1
US-10-305-720-927/c
; Sequence 927, Application US/10305720
; Publication No. US20040010136A1
; GENERAL INFORMATION:
; APPLICANT: Au-Young, Janice K.; Seilhamer, Jeffrey J.
; TITLE OF INVENTION: Composition for the Detection of Signaling Pathway Gene Expressi
; FILE REFERENCE: PA-0002-1 CON
; CURRENT APPLICATION NUMBER: US/10/305,720
; CURRENT FILING DATE: 2002-11-26
; PRIOR APPLICATION NUMBER: 09/016,434
; PRIOR FILING DATE: 1998-01-30
; NUMBER OF SEQ ID NOS: 1490
; SOFTWARE: PERL Program
; SEQ ID NO 927
; LENGTH: 237
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: misc_feature
; OTHER INFORMATION: Incyte ID No. US20040010136A1 773734
US-10-305-720-927

Query Match 100.0%; Score 21; DB 12; Length 237;
Best Local Similarity 100.0%; Pred. No. 0.77;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 GTACCTCATGGCCCGGCTCAG 21
||||||||||||||||||||
Db 55 GTACCTCATGGCCCGGCTCAG 35

RESULT 2
US-09-998-598-32/c
; Sequence 32, Application US/09998598
; Patent No. US20020150922A1
; GENERAL INFORMATION:
; APPLICANT: Stolk, John A.

```
;  APPLICANT:  Xu, Jiangchun
;  APPLICANT:  Chenault, Ruth A.
;  APPLICANT:  Meagher, Madelein Joy
;  TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY AND
;  TITLE OF INVENTION:  DIAGNOSIS OF COLON CANCER
;  FILE REFERENCE: 210121.561
;  CURRENT APPLICATION NUMBER: US/09/998,598
;  CURRENT FILING DATE:  2001-11-16
;  NUMBER OF SEQ ID NOS: 2606
;  SOFTWARE: Corixa Invention Disclosure Database
; SEQ ID NO 32
;   LENGTH: 451
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-998-598-32

  Query Match             100.0%;  Score 21;  DB 10;  Length 451;
  Best Local Similarity   100.0%;  Pred. No. 0.73;
  Matches   21;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 GTACCTCATGGCCCGGCTCAG 21
              |||||||||||||||||||||
Db        109 GTACCTCATGGCCCGGCTCAG 89


RESULT 3
US-09-998-598-2290
; Sequence 2290, Application US/09998598
; Patent No. US20020150922A1
; GENERAL INFORMATION:
;  APPLICANT: Stolk, John A.
;  APPLICANT:  Xu, Jiangchun
;  APPLICANT:  Chenault, Ruth A.
;  APPLICANT:  Meagher, Madelein Joy
;  TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY AND
;  TITLE OF INVENTION:  DIAGNOSIS OF COLON CANCER
;  FILE REFERENCE: 210121.561
;  CURRENT APPLICATION NUMBER: US/09/998,598
;  CURRENT FILING DATE:  2001-11-16
;  NUMBER OF SEQ ID NOS: 2606
;  SOFTWARE: Corixa Invention Disclosure Database
; SEQ ID NO 2290
;   LENGTH: 499
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-998-598-2290

  Query Match             100.0%;  Score 21;  DB 10;  Length 499;
  Best Local Similarity   100.0%;  Pred. No. 0.72;
  Matches   21;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 GTACCTCATGGCCCGGCTCAG 21
              |||||||||||||||||||||
Db        156 GTACCTCATGGCCCGGCTCAG 176


RESULT 4
US-09-604-287A-282/c
; Sequence 282, Application US/09604287A
; Patent No. US20020064872A1
; GENERAL INFORMATION:
;  APPLICANT: Jiang, Yuqiu
;  APPLICANT:  Dillon, Davin C.
;  APPLICANT:  Mitcham, Jennifer L.
;  APPLICANT:  Xu, Jiangchun
;  APPLICANT:  Harlocker, Susan L.
;  APPLICANT:  Hepler, William T.
;  TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY AND
;  TITLE OF INVENTION:  DIAGNOSIS OF BREAST CANCER
;  FILE REFERENCE: 210121.470C7
;  CURRENT APPLICATION NUMBER: US/09/604,287A
;  CURRENT FILING DATE:  2000-06-22
;  NUMBER OF SEQ ID NOS: 489
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 282
;   LENGTH: 502
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-604-287A-282

  Query Match             100.0%;  Score 21;  DB 9;  Length 502;
  Best Local Similarity   100.0%;  Pred. No. 0.72;
  Matches   21;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 GTACCTCATGGCCCGGCTCAG 21
              |||||||||||||||||||||
Db        458 GTACCTCATGGCCCGGCTCAG 438


RESULT 5
US-09-339-338-282/c
; Sequence 282, Application US/09339338A
; Patent No. US20020102602A1
; GENERAL INFORMATION:
;  APPLICANT: Yuqiu, Jiang
;  APPLICANT: Dillon, Davin C.
;  APPLICANT: Mitcham, Jennifer L.
;  APPLICANT: Xu, Jiangchun
;  TITLE OF INVENTION: COMPOSITIONS FOR THE TREATMENT AND
;  TITLE OF INVENTION: DIAGNOSIS OF BREAST CANCER AND METHODS FOR THEIR USE
;  FILE REFERENCE: 210121.470C2
;  CURRENT APPLICATION NUMBER: US/09/339,338A
;  CURRENT FILING DATE: 1999-06-23
;  NUMBER OF SEQ ID NOS: 315
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 282
;   LENGTH: 502
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-339-338-282

  Query Match             100.0%;  Score 21;  DB 10;  Length 502;
  Best Local Similarity   100.0%;  Pred. No. 0.72;
  Matches   21;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 GTACCTCATGGCCCGGCTCAG 21
              |||||||||||||||||||||
Db        458 GTACCTCATGGCCCGGCTCAG 438


RESULT 6
US-09-551-621-282/c
; Sequence 282, Application US/09551621
; Publication No. US20030104366A1
; GENERAL INFORMATION:
;  APPLICANT:  Yuqui, Jiang
;  APPLICANT:  Dillon, Davin C.
;  APPLICANT:  Mitcham, Jennifer L.
;  APPLICANT:  Xu, Jiangchun
;  APPLICANT:  Harlocker, Susan L.
;  TITLE OF INVENTION:  COMPOSITIONS FOR THE TREATMENT AND
;  TITLE OF INVENTION:  DIAGNOSIS OF BREAST CANCER AND METHODS FOR THEIR USE
;  FILE REFERENCE:  210121.470C5
;  CURRENT APPLICATION NUMBER: US/09/551,621
;  CURRENT FILING DATE:  2000-04-17
;  NUMBER OF SEQ ID NOS:  479
;  SOFTWARE:  FastSEQ for Windows Version 3.0
; SEQ ID NO 282
;   LENGTH: 502
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-551-621-282

  Query Match             100.0%;  Score 21;  DB 11;  Length 502;
  Best Local Similarity   100.0%;  Pred. No. 0.72;
  Matches   21;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;
```

```
Qy          1 GTACCTCATGGCCCGGCTCAG 21
              |||||||||||||||||||||
Db        458 GTACCTCATGGCCCGGCTCAG 438


RESULT 7
US-10-124-805-282/c
; Sequence 282, Application US/10124805
; Publication No. US20030166022A1
; GENERAL INFORMATION:
;  APPLICANT: Houghton, Raymond L.
;  APPLICANT:  Sleath, Paul R.
;  APPLICANT:  Persing, David H.
;  TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY
;  TITLE OF INVENTION:  AND DIAGNOSIS OF BREAST CANCER
;  FILE REFERENCE: 210121.470C12
;  CURRENT APPLICATION NUMBER: US/10/124,805
;  CURRENT FILING DATE:  2002-04-15
;  NUMBER OF SEQ ID NOS: 627
;  SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 282
;   LENGTH: 502
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-10-124-805-282

  Query Match             100.0%;  Score 21;  DB 13;  Length 502;
  Best Local Similarity   100.0%;  Pred. No. 0.72;
  Matches   21;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 GTACCTCATGGCCCGGCTCAG 21
              |||||||||||||||||||||
Db        458 GTACCTCATGGCCCGGCTCAG 438


RESULT 8
US-10-007-805-282/c
; Sequence 282, Application US/10007805
; Publication No. US20020150581A1
; GENERAL INFORMATION:
;  APPLICANT: Jiang, Yuqiu
;  APPLICANT:  Dillon, Davin C.
;  APPLICANT:  Mitcham, Jennifer L.
;  APPLICANT:  Xu, Jiangchun
;  APPLICANT:  Harlocker, Susan L.
;  APPLICANT:  Hepler, William T.
;  APPLICANT:  Henderson, Robert A.
;  APPLICANT:  Fanger, Gary R.
;  APPLICANT:  Vedvick, Thomas S.
;  APPLICANT:  McNeill, Patricia D.
;  APPLICANT:  Durham, Margarita
;  TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY
;  TITLE OF INVENTION:  AND DIAGNOSIS OF BREAST CANCER
;  FILE REFERENCE: 210121.470C10
;  CURRENT APPLICATION NUMBER: US/10/007,805
;  CURRENT FILING DATE:  2001-12-07
;  NUMBER OF SEQ ID NOS: 593
;  SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 282
;   LENGTH: 502
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-10-007-805-282

  Query Match             100.0%;  Score 21;  DB 14;  Length 502;
  Best Local Similarity   100.0%;  Pred. No. 0.72;
  Matches   21;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 GTACCTCATGGCCCGGCTCAG 21
              |||||||||||||||||||||
Db        458 GTACCTCATGGCCCGGCTCAG 438


RESULT 9
US-10-076-622-282/c
; Sequence 282, Application US/10076622
; Publication No. US20030023036A1
; GENERAL INFORMATION:
;  APPLICANT: Houghton, Raymond L.
;  APPLICANT:  Sleath, Paul R.
;  APPLICANT:  Persing, David H.
;  TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY
;  TITLE OF INVENTION:  AND DIAGNOSIS OF BREAST CANCER
;  FILE REFERENCE: 210121.470C11
;  CURRENT APPLICATION NUMBER: US/10/076,622
;  CURRENT FILING DATE:  2002-02-13
;  NUMBER OF SEQ ID NOS: 627
;  SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 282
;   LENGTH: 502
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-10-076-622-282

  Query Match             100.0%;  Score 21;  DB 15;  Length 502;
  Best Local Similarity   100.0%;  Pred. No. 0.72;
  Matches   21;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 GTACCTCATGGCCCGGCTCAG 21
              |||||||||||||||||||||
Db        458 GTACCTCATGGCCCGGCTCAG 438


RESULT 10
US-10-097-340-74/c
; Sequence 74, Application US/10097340
; Publication No. US20030087250A1
; GENERAL INFORMATION:
;  APPLICANT: John MONAHAN
;  APPLICANT:  Manjula GANNAVARAPU
;  APPLICANT:  Sebastian HOERSCH
;  APPLICANT:  Shubhangi KAMATKAR
;  APPLICANT:  Steve G. KOVATS
;  APPLICANT:  Rachel E. MEYERS
;  APPLICANT:  Michael MORRISEY
;  APPLICANT:  Peter OLANDT
;  APPLICANT:  Ami SEN
;  APPLICANT:  Peter VEIBY
;  APPLICANT:  Gordon B. MILLS
;  APPLICANT:  Robert C. BAST, Jr.
;  APPLICANT:  Karen LU
;  APPLICANT:  Rosemarie SCHMANDT
;  APPLICANT:  Xumei ZHAO
;  APPLICANT:  Karen GLATT
;  TITLE OF INVENTION: Nucleic Acid Molecules and Proteins For The Identification,
;  TITLE OF INVENTION:  Assessment, Prevention, and Therapy of Ovarian Cancer
;  FILE REFERENCE: MRI-030
;  CURRENT APPLICATION NUMBER: US/10/097,340
;  CURRENT FILING DATE:  2002-03-14
;  PRIOR APPLICATION NUMBER: 60/276,025
;  PRIOR FILING DATE: 2001-03-14
;  PRIOR APPLICATION NUMBER: 60/325,149
;  PRIOR FILING DATE: 2001-09-26
;  PRIOR APPLICATION NUMBER: 60/276,026
;  PRIOR FILING DATE: 2001-03-14
;  PRIOR APPLICATION NUMBER: 60/324,967
;  PRIOR FILING DATE: 2001/09/26
;  PRIOR APPLICATION NUMBER: 60/311,732
;  PRIOR FILING DATE: 2001-08-10
;  PRIOR APPLICATION NUMBER: 60/325,102
;  PRIOR FILING DATE: 2001-09-26
;  PRIOR APPLICATION NUMBER: 60/323,580
;  PRIOR FILING DATE: 2001-09-19
;  NUMBER OF SEQ ID NOS: 363
;  SOFTWARE: FastSEQ for Windows Version 4.0
```

```
; SEQ ID NO 74
;   LENGTH: 1907
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-10-097-340-74

  Query Match             100.0%;  Score 21;  DB 15;  Length 1907;
  Best Local Similarity   100.0%;  Pred. No. 0.65;
  Matches   21;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 GTACCTCATGGCCCGGCTCAG 21
              |||||||||||||||||||||
Db       1100 GTACCTCATGGCCCGGCTCAG 1080


RESULT 11
US-09-964-824A-101/c
; Sequence 101, Application US/09964824A
; Patent No. US20020102531A1
; GENERAL INFORMATION:
;  APPLICANT: Horrigan, Stephen
;  TITLE OF INVENTION: Cancer Gene Determination and Therapeutic Screening Using Signatu
;  TITLE OF INVENTION:  Sets
;  FILE REFERENCE: 689290-73
;  CURRENT APPLICATION NUMBER: US/09/964,824A
;  CURRENT FILING DATE:  2001-09-27
;  PRIOR APPLICATION NUMBER: US/60/236,033
;  PRIOR FILING DATE: 2000-09-28
;  PRIOR APPLICATION NUMBER: US/60/236,032
;  PRIOR FILING DATE: 2000-09-28
;  PRIOR APPLICATION NUMBER: US/60/236,028
;  PRIOR FILING DATE: 2000-09-28
;  NUMBER OF SEQ ID NOS: 583
;  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 101
;   LENGTH: 1915
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-964-824A-101

  Query Match             100.0%;  Score 21;  DB 10;  Length 1915;
  Best Local Similarity   100.0%;  Pred. No. 0.65;
  Matches   21;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 GTACCTCATGGCCCGGCTCAG 21
              |||||||||||||||||||||
Db       1124 GTACCTCATGGCCCGGCTCAG 1104


RESULT 12
US-09-964-824A-563/c
; Sequence 563, Application US/09964824A
; Patent No. US20020102531A1
; GENERAL INFORMATION:
;  APPLICANT: Horrigan, Stephen
;  TITLE OF INVENTION: Cancer Gene Determination and Therapeutic Screening Using Signatu
;  TITLE OF INVENTION:  Sets
;  FILE REFERENCE: 689290-73
;  CURRENT APPLICATION NUMBER: US/09/964,824A
;  CURRENT FILING DATE:  2001-09-27
;  PRIOR APPLICATION NUMBER: US/60/236,033
;  PRIOR FILING DATE: 2000-09-28
;  PRIOR APPLICATION NUMBER: US/60/236,032
;  PRIOR FILING DATE: 2000-09-28
;  PRIOR APPLICATION NUMBER: US/60/236,028
;  PRIOR FILING DATE: 2000-09-28
;  NUMBER OF SEQ ID NOS: 583
;  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 563
;   LENGTH: 1915
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-964-824A-563

  Query Match             100.0%;  Score 21;  DB 10;  Length 1915;
  Best Local Similarity   100.0%;  Pred. No. 0.65;
  Matches   21;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 GTACCTCATGGCCCGGCTCAG 21
              |||||||||||||||||||||
Db       1124 GTACCTCATGGCCCGGCTCAG 1104


RESULT 13
US-09-880-107-3420/c
; Sequence 3420, Application US/09880107
; Patent No. US20020142981A1
; GENERAL INFORMATION:
;  APPLICANT: Horne, Darci T.
;  APPLICANT:  Vockley, Joseph G.
;  APPLICANT:  Scherf, Uwe
;  APPLICANT:  Gene Logic, Inc.
;  TITLE OF INVENTION: Gene Expression Profiles in Liver Cancer
;  FILE REFERENCE: 44921-5028-WO
;  CURRENT APPLICATION NUMBER: US/09/880,107
;  CURRENT FILING DATE:  2001-06-14
;  PRIOR APPLICATION NUMBER: US 60/211,379
;  PRIOR FILING DATE: 2000-06-14
;  PRIOR APPLICATION NUMBER: US 60/237,054
;  PRIOR FILING DATE: 2000-10-02
;  NUMBER OF SEQ ID NOS: 3950
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 3420
;   LENGTH: 1915
;   TYPE: DNA
;   ORGANISM: Homo sapiens
;   FEATURE:
;   OTHER INFORMATION: Genbank Accession No. US20020142981A1 U73843
US-09-880-107-3420

  Query Match             100.0%;  Score 21;  DB 10;  Length 1915;
  Best Local Similarity   100.0%;  Pred. No. 0.65;
  Matches   21;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 GTACCTCATGGCCCGGCTCAG 21
              |||||||||||||||||||||
Db       1124 GTACCTCATGGCCCGGCTCAG 1104


RESULT 14
US-09-967-768A-192/c
; Sequence 192, Application US/09967768A
; Patent No. US20020150877A1
; GENERAL INFORMATION:
;  APPLICANT: Augustus, Meena
;  TITLE OF INVENTION: Cancer Gene Determination and Therapeutic Screening Using Signat
;  TITLE OF INVENTION:  Sets
;  FILE REFERENCE: 689290-72
;  CURRENT APPLICATION NUMBER: US/09/967,768A
;  CURRENT FILING DATE:  2001-09-28
;  PRIOR APPLICATION NUMBER: US/60/236,109
;  PRIOR FILING DATE: 2000-09-28
;  PRIOR APPLICATION NUMBER: US/60/236,034
;  PRIOR FILING DATE: 2000-09-28
;  PRIOR APPLICATION NUMBER: US/60/236,111
;  PRIOR FILING DATE: 2000-09-28
;  NUMBER OF SEQ ID NOS: 325
;  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 192
;   LENGTH: 1915
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-967-768A-192

  Query Match             100.0%;  Score 21;  DB 10;  Length 1915;
  Best Local Similarity   100.0%;  Pred. No. 0.65;
```

```
  Matches   21;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 GTACCTCATGGCCCGGCTCAG 21
              |||||||||||||||||||||
Db       1124 GTACCTCATGGCCCGGCTCAG 1104


RESULT 15
US-09-922-217-1105/c
; Sequence 1105, Application US/09922217
; Patent No. US20020076414A1
; GENERAL INFORMATION:
;  APPLICANT: Xu, Jiangchun
;  APPLICANT:  Lodes, Michael J.
;  APPLICANT:  Secrist, Heather
;  APPLICANT:  Benson, Darin R.
;  APPLICANT:  Meagher, Madeleine Joy
;  APPLICANT:  Stolk, John A.
;  APPLICANT:  Wang, Tongtong
;  APPLICANT:  Jiang, Yuqiu
;  APPLICANT:  Smith, Carole Lynn
;  APPLICANT:  King, Gordon E.
;  APPLICANT:  Wang, Aijun
;  APPLICANT:  Clapper, Jonathan D.
;  TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY AND DIAGNOSIS
;  TITLE OF INVENTION:  OF COLON CANCER AND METHODS FOR THEIR USE
;  FILE REFERENCE: 210121.471C13
;  CURRENT APPLICATION NUMBER: US/09/922,217
;  CURRENT FILING DATE:  2001-08-03
;  NUMBER OF SEQ ID NOS: 1124
;  SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 1105
;   LENGTH: 1917
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-922-217-1105

  Query Match           100.0%;  Score 21;  DB 9;  Length 1917;
  Best Local Similarity  100.0%;  Pred. No. 0.65;
  Matches   21;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 GTACCTCATGGCCCGGCTCAG 21
              |||||||||||||||||||||
Db       1126 GTACCTCATGGCCCGGCTCAG 1106


Search completed: February 13, 2004, 11:48:34
Job time : 16.4034 secs
```

GenCore version 5.1.6

OM nucleic - nucleic search, using sw model

Run on: February 13, 2004, 01:27:22 ; Search time 7.40341 Seconds
(without alignments)
10448.744 Million cell updates/sec

Title: US-08-978-217-13
Perfect score: 21
Sequence: 1 CCGGGACATCCTCATCCACCC 21

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 2449703 seqs, 1841816367 residues

Total number of hits satisfying chosen parameters: 4899406

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Published_Applications_NA:*
1: /cgn2_6/ptodata/1/pubpna/US07_PUBCOMB.seq:*
2: /cgn2_6/ptodata/1/pubpna/PCT_NEW_PUB.seq:*
3: /cgn2_6/ptodata/1/pubpna/US06_NEW_PUB.seq:*
4: /cgn2_6/ptodata/1/pubpna/US06_PUBCOMB.seq:*
5: /cgn2_6/ptodata/1/pubpna/US07_NEW_PUB.seq:*
6: /cgn2_6/ptodata/1/pubpna/PCTUS_PUBCOMB.seq:*
7: /cgn2_6/ptodata/1/pubpna/US08_NEW_PUB.seq:*
8: /cgn2_6/ptodata/1/pubpna/US08_PUBCOMB.seq:*
9: /cgn2_6/ptodata/1/pubpna/US09A_PUBCOMB.seq:*
10: /cgn2_6/ptodata/1/pubpna/US09B_PUBCOMB.seq:*
11: /cgn2_6/ptodata/1/pubpna/US09C_PUBCOMB.seq:*
12: /cgn2_6/ptodata/1/pubpna/US09_NEW_PUB.seq:*
13: /cgn2_6/ptodata/1/pubpna/US09_NEW_PUB.seq2:*
14: /cgn2_6/ptodata/1/pubpna/US10A_PUBCOMB.seq:*
15: /cgn2_6/ptodata/1/pubpna/US10B_PUBCOMB.seq:*
16: /cgn2_6/ptodata/1/pubpna/US10_NEW_PUB.seq:*
17: /cgn2_6/ptodata/1/pubpna/US60_NEW_PUB.seq:*
18: /cgn2_6/ptodata/1/pubpna/US60_PUBCOMB.seq:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

	Result No.	Score	% Query Match	Length	DB	ID	Description
	1	21	100.0	275	15	US-10-060-036-3261	Sequence 3261, Ap
c	2	21	100.0	499	10	US-09-998-598-2290	Sequence 2290, Ap
	3	21	100.0	502	9	US-09-604-287A-282	Sequence 282, App
	4	21	100.0	502	10	US-09-339-338-282	Sequence 282, App
	5	21	100.0	502	11	US-09-551-621-282	Sequence 282, App
	6	21	100.0	502	13	US-10-124-805-282	Sequence 282, App
	7	21	100.0	502	14	US-10-007-805-282	Sequence 282, App
	8	21	100.0	502	15	US-10-076-622-282	Sequence 282, App
c	9	21	100.0	1435	12	US-10-292-798-1601	Sequence 1601, Ap
c	10	21	100.0	1435	13	US-10-017-161-1953	Sequence 1953, Ap
	11	21	100.0	1907	15	US-10-097-340-74	Sequence 74, Appl
	12	21	100.0	1915	10	US-09-964-824A-101	Sequence 101, App
	13	21	100.0	1915	10	US-09-964-824A-563	Sequence 563, App
	14	21	100.0	1915	10	US-09-880-107-3420	Sequence 3420, Ap
	15	21	100.0	1915	10	US-09-967-768A-192	Sequence 192, App
	16	21	100.0	1917	9	US-09-922-217-1105	Sequence 1105, Ap
	17	21	100.0	1917	14	US-10-025-380-1105	Sequence 1105, Ap
	18	21	100.0	1956	12	US-10-264-049-756	Sequence 756, App
	19	21	100.0	1996	9	US-09-925-301-207	Sequence 207, App
	20	21	100.0	2269	12	US-10-131-410-64	Sequence 64, Appl
	21	17.8	84.8	250	9	US-09-864-761-21324	Sequence 21324, A
	22	17.8	84.8	472	9	US-09-864-761-4580	Sequence 4580, Ap
	23	16.8	80.0	471	11	US-09-918-995-23822	Sequence 23822, A
	24	16.8	80.0	792	13	US-10-027-632-138998	Sequence 138998,
	25	16.8	80.0	792	13	US-10-027-632-138999	Sequence 138999,
	26	16.8	80.0	792	14	US-10-027-632-138998	Sequence 138998,
	27	16.8	80.0	792	14	US-10-027-632-138999	Sequence 138999,
c	28	16.8	80.0	825	12	US-10-369-493-43197	Sequence 43197, A
	29	16.8	80.0	1626	15	US-10-156-761-4976	Sequence 4976, Ap
	30	16.8	80.0	2539	15	US-10-198-846-13456	Sequence 13456, A
c	31	16.8	80.0	3049	13	US-10-120-988-186	Sequence 186, App
c	32	16.8	80.0	3083	12	US-10-138-588-21	Sequence 21, Appl
	33	16.8	80.0	9025608	15	US-10-156-761-1	Sequence 1, Appli
	34	16.4	78.1	25	12	US-10-161-493-166	Sequence 166, App
c	35	16.4	78.1	344	11	US-09-918-995-23054	Sequence 23054, A
	36	16.4	78.1	375	15	US-10-156-761-3999	Sequence 3999, Ap
c	37	16.4	78.1	1322	12	US-10-264-237-1190	Sequence 1190, Ap
	38	16.4	78.1	2427	12	US-10-369-493-33512	Sequence 33512, A
c	39	16.4	78.1	3622	12	US-10-159-563-347	Sequence 347, App
	40	16.4	78.1	3653	12	US-10-161-493-17	Sequence 17, Appl
c	41	16.4	78.1	3657	12	US-10-062-674-1718	Sequence 1718, Ap
c	42	16.2	77.1	165	11	US-09-158-722-1	Sequence 1, Appli
c	43	16.2	77.1	279	12	US-10-242-535A-9649	Sequence 9649, Ap
c	44	16.2	77.1	342	15	US-10-066-543-2502	Sequence 2502, Ap
	45	16.2	77.1	361	9	US-09-735-705-303	Sequence 303, App

ALIGNMENTS

RESULT 1
US-10-060-036-3261
; Sequence 3261, Application US/10060036
; Publication No. US20030073144A1
; GENERAL INFORMATION:
; APPLICANT: Benson, Darin R.
; APPLICANT: Kalos, Michael D.
; APPLICANT: Lodes, Michael J.
; APPLICANT: Persing, David H.
; APPLICANT: Hepler, William T.
; APPLICANT: Jiang, Yuqiu
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY
; TITLE OF INVENTION: AND DIAGNOSIS OF PANCREATIC CANCER
; FILE REFERENCE: 210121.566
; CURRENT APPLICATION NUMBER: US/10/060,036
; CURRENT FILING DATE: 2002-01-30
; NUMBER OF SEQ ID NOS: 4560
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 3261
; LENGTH: 275
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-060-036-3261

Query Match 100.0%; Score 21; DB 15; Length 275;
Best Local Similarity 100.0%; Pred. No. 2.5;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CCGGGACATCCTCATCCACCC 21
||||||||||||||||||||
Db 109 CCGGGACATCCTCATCCACCC 129

RESULT 2
US-09-998-598-2290/c
; Sequence 2290, Application US/09998598
; Patent No. US20020150922A1
; GENERAL INFORMATION:

```
;  APPLICANT: Stolk, John A.
;  APPLICANT:  Xu, Jiangchun
;  APPLICANT:  Chenault, Ruth A.
;  APPLICANT:  Meagher, Madelein Joy
;  TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY AND
;  TITLE OF INVENTION:  DIAGNOSIS OF COLON CANCER
;  FILE REFERENCE: 210121.561
;  CURRENT APPLICATION NUMBER: US/09/998,598
;  CURRENT FILING DATE:  2001-11-16
;  NUMBER OF SEQ ID NOS: 2606
;  SOFTWARE: Corixa Invention Disclosure Database
; SEQ ID NO 2290
;   LENGTH: 499
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-998-598-2290

  Query Match             100.0%;  Score 21;  DB 10;  Length 499;
  Best Local Similarity   100.0%;  Pred. No. 2.4;
  Matches   21;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 CCGGGACATCCTCATCCACCC 21
              |||||||||||||||||||||
Db        324 CCGGGACATCCTCATCCACCC 304


RESULT 3
US-09-604-287A-282
; Sequence 282, Application US/09604287A
; Patent No. US20020064872A1
; GENERAL INFORMATION:
;  APPLICANT: Jiang, Yuqiu
;  APPLICANT:  Dillon, Davin C.
;  APPLICANT:  Mitcham, Jennifer L.
;  APPLICANT:  Xu, Jiangchun
;  APPLICANT:  Harlocker, Susan L.
;  APPLICANT:  Hepler, William T.
;  TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY AND
;  TITLE OF INVENTION:  DIAGNOSIS OF BREAST CANCER
;  FILE REFERENCE: 210121.470C7
;  CURRENT APPLICATION NUMBER: US/09/604,287A
;  CURRENT FILING DATE:  2000-06-22
;  NUMBER OF SEQ ID NOS: 489
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 282
;   LENGTH: 502
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-604-287A-282

  Query Match             100.0%;  Score 21;  DB 9;  Length 502;
  Best Local Similarity   100.0%;  Pred. No. 2.4;
  Matches   21;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 CCGGGACATCCTCATCCACCC 21
              |||||||||||||||||||||
Db        290 CCGGGACATCCTCATCCACCC 310


RESULT 4
US-09-339-338-282
; Sequence 282, Application US/09339338A
; Patent No. US20020102602A1
; GENERAL INFORMATION:
;  APPLICANT: Yuqiu, Jiang
;  APPLICANT: Dillon, Davin C.
;  APPLICANT: Mitcham, Jennifer L.
;  APPLICANT: Xu, Jiangchun
;  TITLE OF INVENTION: COMPOSITIONS FOR THE TREATMENT AND
;  TITLE OF INVENTION: DIAGNOSIS OF BREAST CANCER AND METHODS FOR THEIR USE
;  FILE REFERENCE: 210121.470C2
;  CURRENT APPLICATION NUMBER: US/09/339,338A
;  CURRENT FILING DATE: 1999-06-23
;  NUMBER OF SEQ ID NOS: 315
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 282
;   LENGTH: 502
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-339-338-282

  Query Match             100.0%;  Score 21;  DB 10;  Length 502;
  Best Local Similarity   100.0%;  Pred. No. 2.4;
  Matches   21;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 CCGGGACATCCTCATCCACCC 21
              |||||||||||||||||||||
Db        290 CCGGGACATCCTCATCCACCC 310


RESULT 5
US-09-551-621-282
; Sequence 282, Application US/09551621
; Publication No. US20030104366A1
; GENERAL INFORMATION:
;  APPLICANT:  Yuqui, Jiang
;  APPLICANT:  Dillon, Davin C.
;  APPLICANT:  Mitcham, Jennifer L.
;  APPLICANT:  Xu, Jiangchun
;  APPLICANT:  Harlocker, Susan L.
;  TITLE OF INVENTION:  COMPOSITIONS FOR THE TREATMENT AND
;  TITLE OF INVENTION:  DIAGNOSIS OF BREAST CANCER AND METHODS FOR THEIR USE
;  FILE REFERENCE:  210121.470C5
;  CURRENT APPLICATION NUMBER: US/09/551,621
;  CURRENT FILING DATE:  2000-04-17
;  NUMBER OF SEQ ID NOS:  479
;  SOFTWARE:  FastSEQ for Windows Version 3.0
; SEQ ID NO 282
;   LENGTH: 502
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-551-621-282

  Query Match             100.0%;  Score 21;  DB 11;  Length 502;
  Best Local Similarity   100.0%;  Pred. No. 2.4;
  Matches   21;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 CCGGGACATCCTCATCCACCC 21
              |||||||||||||||||||||
Db        290 CCGGGACATCCTCATCCACCC 310


RESULT 6
US-10-124-805-282
; Sequence 282, Application US/10124805
; Publication No. US20030166022A1
; GENERAL INFORMATION:
;  APPLICANT: Houghton, Raymond L.
;  APPLICANT:  Sleath, Paul R.
;  APPLICANT:  Persing, David H.
;  TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY
;  TITLE OF INVENTION:  AND DIAGNOSIS OF BREAST CANCER
;  FILE REFERENCE: 210121.470C12
;  CURRENT APPLICATION NUMBER: US/10/124,805
;  CURRENT FILING DATE:  2002-04-15
;  NUMBER OF SEQ ID NOS: 627
;  SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 282
;   LENGTH: 502
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-10-124-805-282

  Query Match             100.0%;  Score 21;  DB 13;  Length 502;
  Best Local Similarity   100.0%;  Pred. No. 2.4;
  Matches   21;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;
```

```
Qy          1 CCGGGACATCCTCATCCACCC 21
              |||||||||||||||||||||
Db        290 CCGGGACATCCTCATCCACCC 310


RESULT 7
US-10-007-805-282
; Sequence 282, Application US/10007805
; Publication No. US20020150581A1
; GENERAL INFORMATION:
;  APPLICANT: Jiang, Yuqiu
;  APPLICANT:  Dillon, Davin C.
;  APPLICANT:  Mitcham, Jennifer L.
;  APPLICANT:  Xu, Jiangchun
;  APPLICANT:  Harlocker, Susan L.
;  APPLICANT:  Hepler, William T.
;  APPLICANT:  Henderson, Robert A.
;  APPLICANT:  Fanger, Gary R.
;  APPLICANT:  Vedvick, Thomas S.
;  APPLICANT:  McNeill, Patricia D.
;  APPLICANT:  Durham, Margarita
;  TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY
;  TITLE OF INVENTION:  AND DIAGNOSIS OF BREAST CANCER
;  FILE REFERENCE: 210121.470C10
;  CURRENT APPLICATION NUMBER: US/10/007,805
;  CURRENT FILING DATE:  2001-12-07
;  NUMBER OF SEQ ID NOS: 593
;  SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 282
;   LENGTH: 502
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-10-007-805-282

  Query Match             100.0%;  Score 21;  DB 14;  Length 502;
  Best Local Similarity   100.0%;  Pred. No. 2.4;
  Matches   21;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 CCGGGACATCCTCATCCACCC 21
              |||||||||||||||||||||
Db        290 CCGGGACATCCTCATCCACCC 310


RESULT 8
US-10-076-622-282
; Sequence 282, Application US/10076622
; Publication No. US20030023036A1
; GENERAL INFORMATION:
;  APPLICANT: Houghton, Raymond L.
;  APPLICANT:  Sleath, Paul R.
;  APPLICANT:  Persing, David H.
;  TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY
;  TITLE OF INVENTION:  AND DIAGNOSIS OF BREAST CANCER
;  FILE REFERENCE: 210121.470C11
;  CURRENT APPLICATION NUMBER: US/10/076,622
;  CURRENT FILING DATE:  2002-02-13
;  NUMBER OF SEQ ID NOS: 627
;  SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 282
;   LENGTH: 502
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-10-076-622-282

  Query Match             100.0%;  Score 21;  DB 15;  Length 502;
  Best Local Similarity   100.0%;  Pred. No. 2.4;
  Matches   21;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 CCGGGACATCCTCATCCACCC 21
              |||||||||||||||||||||
Db        290 CCGGGACATCCTCATCCACCC 310


RESULT 9
US-10-292-798-1601/c
; Sequence 1601, Application US/10292798
; Publication No. US20030235833A1
; GENERAL INFORMATION:
;  APPLICANT: SUWA, MAKIKO
;  APPLICANT:  ASAI, KIYOSHI
;  APPLICANT:  AKIYAMA, YUTAKA
;  APPLICANT:  ABURATANI, HIROYUKI
;  TITLE OF INVENTION: GUANOSINE TRIPHOSPHATE-BINDING PROTEIN COUPLED RECEPTORS
;  FILE REFERENCE: 084335/166
;  CURRENT APPLICATION NUMBER: US/10/292,798
;  CURRENT FILING DATE:  2002-11-13
;  PRIOR APPLICATION NUMBER: 10/017,161
;  PRIOR FILING DATE: 2001-12-18
;  PRIOR APPLICATION NUMBER: JP 2001-246789
;  PRIOR FILING DATE: 2001-06-18
;  NUMBER OF SEQ ID NOS: 2070
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 1601
;   LENGTH: 1435
;   TYPE: DNA
;   ORGANISM: Homo sapiens
;   FEATURE:
;   LOCATION: source
;   FEATURE:
;   LOCATION: (1)..(1435)
;   FEATURE:
;   NAME/KEY: CDS
;   LOCATION: (201)..(1235)
;   FEATURE:
;   NAME/KEY: modified_base
;   LOCATION: (1040)..(1139)
;   OTHER INFORMATION: a, t, c, g, unknown or other
;   FEATURE:
;   NAME/KEY: modified_base
;   LOCATION: (1145)..(1145)
;   OTHER INFORMATION: a, t, c, g, unknown or other
US-10-292-798-1601

  Query Match             100.0%;  Score 21;  DB 12;  Length 1435;
  Best Local Similarity   100.0%;  Pred. No. 2.4;
  Matches   21;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 CCGGGACATCCTCATCCACCC 21
              |||||||||||||||||||||
Db        335 CCGGGACATCCTCATCCACCC 315


RESULT 10
US-10-017-161-1953/c
; Sequence 1953, Application US/10017161
; Publication No. US20030143668A1
; GENERAL INFORMATION:
;  APPLICANT: SUWA, MAKIKO
;  APPLICANT:  ASAI, KIYOSHI
;  APPLICANT:  AKIYAMA, YUTAKA
;  APPLICANT:  ABURATANI, HIROYUKI
;  TITLE OF INVENTION: NOVEL G PROTEIN-COUPLED RECEPTORS
;  FILE REFERENCE: 084335/0152
;  CURRENT APPLICATION NUMBER: US/10/017,161
;  CURRENT FILING DATE:  2002-12-18
;  PRIOR APPLICATION NUMBER: JP 2001/246789
;  PRIOR FILING DATE: 2001-06-18
;  NUMBER OF SEQ ID NOS: 2430
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 1953
;   LENGTH: 1435
;   TYPE: DNA
;   ORGANISM: Homo sapiens
;   FEATURE:
;   NAME/KEY: source
```

; LOCATION: (1)..(1435)
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (201)..(1235)
; FEATURE:
; NAME/KEY: modified_base
; LOCATION: (1040)..(1139)
; OTHER INFORMATION: a, t, c, g, unknown or other
; FEATURE:
; NAME/KEY: modified_base
; LOCATION: (1145)
; OTHER INFORMATION: a, t, c, g, unknown or other
US-10-017-161-1953

Query Match 100.0%; Score 21; DB 13; Length 1435;
Best Local Similarity 100.0%; Pred. No. 2.4;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CCGGGACATCCTCATCCACCC 21
||||||||||||||||||||
Db 335 CCGGGACATCCTCATCCACCC 315

RESULT 11
US-10-097-340-74
; Sequence 74, Application US/10097340
; Publication No. US20030087250A1
; GENERAL INFORMATION:
; APPLICANT: John MONAHAN
; APPLICANT: Manjula GANNAVARAPU
; APPLICANT: Sebastian HOERSCH
; APPLICANT: Shubhangi KAMATKAR
; APPLICANT: Steve G. KOVATS
; APPLICANT: Rachel E. MEYERS
; APPLICANT: Michael MORRISEY
; APPLICANT: Peter OLANDT
; APPLICANT: Ami SEN
; APPLICANT: Peter VEIBY
; APPLICANT: Gordon B. MILLS
; APPLICANT: Robert C. BAST, Jr.
; APPLICANT: Karen LU
; APPLICANT: Rosemarie SCHMANDT
; APPLICANT: Xumei ZHAO
; APPLICANT: Karen GLATT
; TITLE OF INVENTION: Nucleic Acid Molecules and Proteins For The Identification,
; TITLE OF INVENTION: Assessment, Prevention, and Therapy of Ovarian Cancer
; FILE REFERENCE: MRI-030
; CURRENT APPLICATION NUMBER: US/10/097,340
; CURRENT FILING DATE: 2002-03-14
; PRIOR APPLICATION NUMBER: 60/276,025
; PRIOR FILING DATE: 2001-03-14
; PRIOR APPLICATION NUMBER: 60/325,149
; PRIOR FILING DATE: 2001-09-26
; PRIOR APPLICATION NUMBER: 60/276,026
; PRIOR FILING DATE: 2001-03-14
; PRIOR APPLICATION NUMBER: 60/324,967
; PRIOR FILING DATE: 2001/09/26
; PRIOR APPLICATION NUMBER: 60/311,732
; PRIOR FILING DATE: 2001-08-10
; PRIOR APPLICATION NUMBER: 60/325,102
; PRIOR FILING DATE: 2001-09-26
; PRIOR APPLICATION NUMBER: 60/323,580
; PRIOR FILING DATE: 2001-09-19
; NUMBER OF SEQ ID NOS: 363
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 74
; LENGTH: 1907
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-097-340-74

Query Match 100.0%; Score 21; DB 15; Length 1907;
Best Local Similarity 100.0%; Pred. No. 2.3;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CCGGGACATCCTCATCCACCC 21
||||||||||||||||||||
Db 932 CCGGGACATCCTCATCCACCC 952

RESULT 12
US-09-964-824A-101
; Sequence 101, Application US/09964824A
; Patent No. US20020102531A1
; GENERAL INFORMATION:
; APPLICANT: Horrigan, Stephen
; TITLE OF INVENTION: Cancer Gene Determination and Therapeutic Screening Using Signat
; TITLE OF INVENTION: Sets
; FILE REFERENCE: 689290-73
; CURRENT APPLICATION NUMBER: US/09/964,824A
; CURRENT FILING DATE: 2001-09-27
; PRIOR APPLICATION NUMBER: US/60/236,033
; PRIOR FILING DATE: 2000-09-28
; PRIOR APPLICATION NUMBER: US/60/236,032
; PRIOR FILING DATE: 2000-09-28
; PRIOR APPLICATION NUMBER: US/60/236,028
; PRIOR FILING DATE: 2000-09-28
; NUMBER OF SEQ ID NOS: 583
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 101
; LENGTH: 1915
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-964-824A-101

Query Match 100.0%; Score 21; DB 10; Length 1915;
Best Local Similarity 100.0%; Pred. No. 2.3;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CCGGGACATCCTCATCCACCC 21
||||||||||||||||||||
Db 956 CCGGGACATCCTCATCCACCC 976

RESULT 13
US-09-964-824A-563
; Sequence 563, Application US/09964824A
; Patent No. US20020102531A1
; GENERAL INFORMATION:
; APPLICANT: Horrigan, Stephen
; TITLE OF INVENTION: Cancer Gene Determination and Therapeutic Screening Using Signat
; TITLE OF INVENTION: Sets
; FILE REFERENCE: 689290-73
; CURRENT APPLICATION NUMBER: US/09/964,824A
; CURRENT FILING DATE: 2001-09-27
; PRIOR APPLICATION NUMBER: US/60/236,033
; PRIOR FILING DATE: 2000-09-28
; PRIOR APPLICATION NUMBER: US/60/236,032
; PRIOR FILING DATE: 2000-09-28
; PRIOR APPLICATION NUMBER: US/60/236,028
; PRIOR FILING DATE: 2000-09-28
; NUMBER OF SEQ ID NOS: 583
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 563
; LENGTH: 1915
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-964-824A-563

Query Match 100.0%; Score 21; DB 10; Length 1915;
Best Local Similarity 100.0%; Pred. No. 2.3;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CCGGGACATCCTCATCCACCC 21
||||||||||||||||||||
Db 956 CCGGGACATCCTCATCCACCC 976

```
RESULT 14
US-09-880-107-3420
; Sequence 3420, Application US/09880107
; Patent No. US20020142981A1
; GENERAL INFORMATION:
;  APPLICANT: Horne, Darci T.
;  APPLICANT:  Vockley, Joseph G.
;  APPLICANT:  Scherf, Uwe
;  APPLICANT:  Gene Logic, Inc.
;  TITLE OF INVENTION: Gene Expression Profiles in Liver Cancer
;  FILE REFERENCE: 44921-5028-WO
;  CURRENT APPLICATION NUMBER: US/09/880,107
;  CURRENT FILING DATE:  2001-06-14
;  PRIOR APPLICATION NUMBER: US 60/211,379
;  PRIOR FILING DATE: 2000-06-14
;  PRIOR APPLICATION NUMBER: US 60/237,054
;  PRIOR FILING DATE: 2000-10-02
;  NUMBER OF SEQ ID NOS: 3950
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 3420
;   LENGTH: 1915
;   TYPE: DNA
;   ORGANISM: Homo sapiens
;   FEATURE:
;   OTHER INFORMATION: Genbank Accession No. US20020142981A1 U73843
US-09-880-107-3420

  Query Match             100.0%;  Score 21;  DB 10;  Length 1915;
  Best Local Similarity   100.0%;  Pred. No. 2.3;
  Matches   21;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 CCGGGACATCCTCATCCACCC 21
              |||||||||||||||||||||
Db        956 CCGGGACATCCTCATCCACCC 976


RESULT 15
US-09-967-768A-192
; Sequence 192, Application US/09967768A
; Patent No. US20020150877A1
; GENERAL INFORMATION:
;  APPLICANT: Augustus, Meena
;  TITLE OF INVENTION: Cancer Gene Determination and Therapeutic Screening Using Signatu
;  TITLE OF INVENTION:  Sets
;  FILE REFERENCE: 689290-72
;  CURRENT APPLICATION NUMBER: US/09/967,768A
;  CURRENT FILING DATE:  2001-09-28
;  PRIOR APPLICATION NUMBER: US/60/236,109
;  PRIOR FILING DATE: 2000-09-28
;  PRIOR APPLICATION NUMBER: US/60/236,034
;  PRIOR FILING DATE: 2000-09-28
;  PRIOR APPLICATION NUMBER: US/60/236,111
;  PRIOR FILING DATE: 2000-09-28
;  NUMBER OF SEQ ID NOS: 325
;  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 192
;   LENGTH: 1915
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-967-768A-192

  Query Match             100.0%;  Score 21;  DB 10;  Length 1915;
  Best Local Similarity   100.0%;  Pred. No. 2.3;
  Matches   21;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 CCGGGACATCCTCATCCACCC 21
              |||||||||||||||||||||
Db        956 CCGGGACATCCTCATCCACCC 976


Search completed: February 13, 2004, 11:48:25
Job time : 13.4034 secs
```

GenCore version 5.1.6

OM protein - nucleic search, using frame_plus_p2n model

Run on: February 12, 2004, 21:34:51 ; Search time 25.2461 Seconds
(without alignments)
2334.540 Million cell updates/sec

Title: US-08-978-217-12
Perfect score: 84
Sequence: 1 KNSSGWKEEEVLQSRN 16

Scoring table: BLOSUM62
Xgapop 10.0 , Xgapext 0.5
Ygapop 10.0 , Ygapext 0.5
Fgapop 6.0 , Fgapext 7.0
Delop 6.0 , Delext 7.0

Searched: 2449703 seqs, 1841816367 residues

Total number of hits satisfying chosen parameters: 4899406

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Command line parameters:
-MODEL=frame+_p2n.model -DEV=xlh
-Q=/cgn2_1/USPTO_spool/US08978217/runat_10022004_133827_20514/app_query.fasta_1.1500
-DB=Published_Applications_NA -QFMT=fastap -SUFFIX=rnpb -MINMATCH=0.1
-LOOPCL=0 -LOOPEXT=0 -UNITS=bits -START=1 -END=-1 -MATRIX=blosum62
-TRANS=human40.cdi -LIST=45 -DOCALIGN=200 -THR_SCORE=pct -THR_MAX=100
-THR_MIN=0 -ALIGN=15 -MODE=LOCAL -OUTFMT=pto -NORM=ext -HEAPSIZE=500 -MINLEN=0
-MAXLEN=2000000000 -USER=US08978217_@CGN_1_1_690_@runat_10022004_133827_20514
-NCPU=6 -ICPU=3 -NO_MMAP -LARGEQUERY -NEG_SCORES=0 -WAIT -DSPBLOCK=100
-LONGLOG -DEV_TIMEOUT=120 -WARN_TIMEOUT=30 -THREADS=1 -XGAPOP=10 -XGAPEXT=0.5
-FGAPOP=6 -FGAPEXT=7 -YGAPOP=10 -YGAPEXT=0.5 -DELOP=6 -DELEXT=7

Database : Published_Applications_NA:*
1: /cgn2_6/ptodata/1/pubpna/US07_PUBCOMB.seq:*
2: /cgn2_6/ptodata/1/pubpna/PCT_NEW_PUB.seq:*
3: /cgn2_6/ptodata/1/pubpna/US06_NEW_PUB.seq:*
4: /cgn2_6/ptodata/1/pubpna/US06_PUBCOMB.seq:*
5: /cgn2_6/ptodata/1/pubpna/US07_NEW_PUB.seq:*
6: /cgn2_6/ptodata/1/pubpna/PCTUS_PUBCOMB.seq:*
7: /cgn2_6/ptodata/1/pubpna/US08_NEW_PUB.seq:*
8: /cgn2_6/ptodata/1/pubpna/US08_PUBCOMB.seq:*
9: /cgn2_6/ptodata/1/pubpna/US09A_PUBCOMB.seq:*
10: /cgn2_6/ptodata/1/pubpna/US09B_PUBCOMB.seq:*
11: /cgn2_6/ptodata/1/pubpna/US09C_PUBCOMB.seq:*
12: /cgn2_6/ptodata/1/pubpna/US09_NEW_PUB.seq:*
13: /cgn2_6/ptodata/1/pubpna/US09_NEW_PUB.seq2:*
14: /cgn2_6/ptodata/1/pubpna/US10A_PUBCOMB.seq:*
15: /cgn2_6/ptodata/1/pubpna/US10B_PUBCOMB.seq:*
16: /cgn2_6/ptodata/1/pubpna/US10_NEW_PUB.seq:*
17: /cgn2_6/ptodata/1/pubpna/US60_NEW_PUB.seq:*
18: /cgn2_6/ptodata/1/pubpna/US60_PUBCOMB.seq:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

	Result No.	Score	% Query Match	Length	DB	ID	Description
	1	84	100.0	237	12	US-10-305-720-927	Sequence 927, App
	2	84	100.0	451	10	US-09-998-598-32	Sequence 32, Appl
c	3	84	100.0	499	10	US-09-998-598-2290	Sequence 2290, Ap
	4	84	100.0	528	15	US-10-066-543-3233	Sequence 3233, Ap
	5	84	100.0	620	15	US-10-060-036-2379	Sequence 2379, Ap
	6	84	100.0	1907	15	US-10-097-340-74	Sequence 74, Appl
	7	84	100.0	1915	10	US-09-964-824A-101	Sequence 101, App
	8	84	100.0	1915	10	US-09-964-824A-563	Sequence 563, App
	9	84	100.0	1915	10	US-09-880-107-3420	Sequence 3420, Ap
	10	84	100.0	1915	10	US-09-967-768A-192	Sequence 192, App
	11	84	100.0	1917	9	US-09-922-217-1105	Sequence 1105, Ap
	12	84	100.0	1917	14	US-10-025-380-1105	Sequence 1105, Ap
	13	84	100.0	1956	12	US-10-264-049-756	Sequence 756, App
	14	84	100.0	1996	9	US-09-925-301-207	Sequence 207, App
	15	84	100.0	2269	12	US-10-131-410-64	Sequence 64, Appl
c	16	57	67.9	1681	11	US-09-986-480-40	Sequence 40, Appl
c	17	52	61.9	1601	12	US-10-062-674-1730	Sequence 1730, Ap
c	18	50	59.5	535	13	US-10-029-386-3052	Sequence 3052, Ap
c	19	50	59.5	11788	13	US-10-316-253-263	Sequence 263, App
	20	49	58.3	807	13	US-10-027-632-167020	Sequence 167020,
	21	49	58.3	807	14	US-10-027-632-167020	Sequence 167020,
c	22	48	57.1	174	10	US-09-933-797-678	Sequence 678, App
	23	47	56.0	402	11	US-09-918-995-33421	Sequence 33421, A
	24	47	56.0	254366	11	US-09-822-871-3	Sequence 3, Appli
	25	46.5	55.4	787	13	US-10-027-632-125191	Sequence 125191,
	26	46.5	55.4	787	14	US-10-027-632-125191	Sequence 125191,
	27	46	54.8	552	13	US-10-027-632-90917	Sequence 90917, A
	28	46	54.8	552	14	US-10-027-632-90917	Sequence 90917, A
c	29	46	54.8	1571	10	US-09-938-842A-4493	Sequence 4493, Ap
c	30	46	54.8	1571	12	US-09-938-842A-4493	Sequence 4493, Ap
	31	46	54.8	3060	10	US-09-938-842A-760	Sequence 760, App
	32	46	54.8	3060	12	US-09-938-842A-760	Sequence 760, App
c	33	46	54.8	3096	13	US-10-027-632-112161	Sequence 112161,
c	34	46	54.8	3096	13	US-10-027-632-112162	Sequence 112162,
c	35	46	54.8	3096	13	US-10-027-632-113958	Sequence 113958,
c	36	46	54.8	3096	13	US-10-027-632-113959	Sequence 113959,
c	37	46	54.8	3096	14	US-10-027-632-112161	Sequence 112161,
c	38	46	54.8	3096	14	US-10-027-632-112162	Sequence 112162,
c	39	46	54.8	3096	14	US-10-027-632-113958	Sequence 113958,
c	40	46	54.8	3096	14	US-10-027-632-113959	Sequence 113959,
	41	46	54.8	8100	13	US-09-190-246-4	Sequence 4, Appli
	42	46	54.8	10610	11	US-09-994-412-3	Sequence 3, Appli
	43	46	54.8	11517	10	US-09-901-106-1	Sequence 1, Appli
	44	46	54.8	15538	13	US-09-190-246-1	Sequence 1, Appli
	45	45	53.6	463	10	US-09-983-965-4018	Sequence 4018, Ap

ALIGNMENTS

RESULT 1
US-10-305-720-927
; Sequence 927, Application US/10305720
; Publication No. US20040010136A1
; GENERAL INFORMATION:
; APPLICANT: Au-Young, Janice K.; Seilhamer, Jeffrey J.
; TITLE OF INVENTION: Composition for the Detection of Signaling Pathway Gene Expressic
; FILE REFERENCE: PA-0002-1 CON
; CURRENT APPLICATION NUMBER: US/10/305,720
; CURRENT FILING DATE: 2002-11-26
; PRIOR APPLICATION NUMBER: 09/016,434
; PRIOR FILING DATE: 1998-01-30
; NUMBER OF SEQ ID NOS: 1490
; SOFTWARE: PERL Program
; SEQ ID NO 927
; LENGTH: 237
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: misc_feature
; OTHER INFORMATION: Incyte ID No. US20040010136A1 773734
US-10-305-720-927

Alignment Scores:

Pred. No.:	3.23e-06	Length:	237
Score:	84.00	Matches:	16
Percent Similarity:	100.00%	Conservative:	0
Best Local Similarity:	100.00%	Mismatches:	0
Query Match:	100.00%	Indels:	0
DB:	12	Gaps:	0

US-08-978-217-12 (1-16) x US-10-305-720-927 (1-237)

```
Qy          1 LysAsnSerSerGlyTrpLysGluGluGluValLeuGlnSerArgAsn 16
              ||||||||||||||||||||||||||||||||||||||||||||||||
Db        116 AAAAACTCAAGCGGCTGGAAGGAGGAAGAGGTTCTCCAGAGTCGGAAC 163
```

RESULT 2
US-09-998-598-32
; Sequence 32, Application US/09998598
; Patent No. US20020150922A1
; GENERAL INFORMATION:
; APPLICANT: Stolk, John A.
; APPLICANT: Xu, Jiangchun
; APPLICANT: Chenault, Ruth A.
; APPLICANT: Meagher, Madelein Joy
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY AND
; TITLE OF INVENTION: DIAGNOSIS OF COLON CANCER
; FILE REFERENCE: 210121.561
; CURRENT APPLICATION NUMBER: US/09/998,598
; CURRENT FILING DATE: 2001-11-16
; NUMBER OF SEQ ID NOS: 2606
; SOFTWARE: Corixa Invention Disclosure Database
; SEQ ID NO 32
; LENGTH: 451
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-998-598-32

Alignment Scores:			
Pred. No.:	6.43e-06	Length:	451
Score:	84.00	Matches:	16
Percent Similarity:	100.00%	Conservative:	0
Best Local Similarity:	100.00%	Mismatches:	0
Query Match:	100.00%	Indels:	0
DB:	10	Gaps:	0

US-08-978-217-12 (1-16) x US-09-998-598-32 (1-451)

```
Qy          1 LysAsnSerSerGlyTrpLysGluGluGluValLeuGlnSerArgAsn 16
              ||||||||||||||||||||||||||||||||||||||||||||||||
Db        170 AAAAACTCAAGCGGCTGGAAGGAGGAAGAGGTTCTCCAGAGTCGGAAC 217
```

RESULT 3
US-09-998-598-2290/c
; Sequence 2290, Application US/09998598
; Patent No. US20020150922A1
; GENERAL INFORMATION:
; APPLICANT: Stolk, John A.
; APPLICANT: Xu, Jiangchun
; APPLICANT: Chenault, Ruth A.
; APPLICANT: Meagher, Madelein Joy
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY AND
; TITLE OF INVENTION: DIAGNOSIS OF COLON CANCER
; FILE REFERENCE: 210121.561
; CURRENT APPLICATION NUMBER: US/09/998,598
; CURRENT FILING DATE: 2001-11-16
; NUMBER OF SEQ ID NOS: 2606
; SOFTWARE: Corixa Invention Disclosure Database
; SEQ ID NO 2290
; LENGTH: 499
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-998-598-2290

Alignment Scores:			
Pred. No.:	7.17e-06	Length:	499
Score:	84.00	Matches:	16
Percent Similarity:	100.00%	Conservative:	0
Best Local Similarity:	100.00%	Mismatches:	0
Query Match:	100.00%	Indels:	0
DB:	10	Gaps:	0

US-08-978-217-12 (1-16) x US-09-998-598-2290 (1-499)

```
Qy          1 LysAsnSerSerGlyTrpLysGluGluGluValLeuGlnSerArgAsn 16
              ||||||||||||||||||||||||||||||||||||||||||||||||
Db         95 AAAAACTCAAGCGGCTGGAAGGAGGAAGAGGTTCTCCAGAGTCGGAAC 48
```

RESULT 4
US-10-066-543-3233
; Sequence 3233, Application US/10066543
; Publication No. US20030087818A1
; GENERAL INFORMATION:
; APPLICANT: Jiang, Yuqiu
; APPLICANT: Pyle, Ruth A.
; APPLICANT: Xu, Jiangchun
; APPLICANT: Indirias, Carol Yoseph
; APPLICANT: Lodes, Michael J.
; APPLICANT: Secrist, Heather
; APPLICANT: Carter, Darrick
; APPLICANT: Fanger, Gary R.
; APPLICANT: Smith, Carole L.
; APPLICANT: Durham, Margarita
; APPLICANT: Stolk, John A.
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY
; TITLE OF INVENTION: AND DIAGNOSIS OF COLON CANCER
; FILE REFERENCE: 210121.563
; CURRENT APPLICATION NUMBER: US/10/066,543
; CURRENT FILING DATE: 2002-01-31
; NUMBER OF SEQ ID NOS: 3417
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 3233
; LENGTH: 528
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: 438
; OTHER INFORMATION: n = A,T,C or G
US-10-066-543-3233

Alignment Scores:			
Pred. No.:	7.62e-06	Length:	528
Score:	84.00	Matches:	16
Percent Similarity:	100.00%	Conservative:	0
Best Local Similarity:	100.00%	Mismatches:	0
Query Match:	100.00%	Indels:	0
DB:	15	Gaps:	0

US-08-978-217-12 (1-16) x US-10-066-543-3233 (1-528)

```
Qy          1 LysAsnSerSerGlyTrpLysGluGluGluValLeuGlnSerArgAsn 16
              ||||||||||||||||||||||||||||||||||||||||||||||||
Db         63 AAAAACTCAAGCGGCTGGAAGGAGGAAGAGGTTCTCCAGAGTCGGAAC 110
```

RESULT 5
US-10-060-036-2379
; Sequence 2379, Application US/10060036
; Publication No. US20030073144A1
; GENERAL INFORMATION:
; APPLICANT: Benson, Darin R.
; APPLICANT: Kalos, Michael D.
; APPLICANT: Lodes, Michael J.
; APPLICANT: Persing, David H.
; APPLICANT: Hepler, William T.
; APPLICANT: Jiang, Yuqiu
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY
; TITLE OF INVENTION: AND DIAGNOSIS OF PANCREATIC CANCER
; FILE REFERENCE: 210121.566

```
;  CURRENT APPLICATION NUMBER: US/10/060,036
;  CURRENT FILING DATE:  2002-01-30
;  NUMBER OF SEQ ID NOS: 4560
;  SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 2379
;    LENGTH: 620
;    TYPE: DNA
;    ORGANISM: Homo sapiens
;    FEATURE:
;    NAME/KEY: misc_feature
;    LOCATION: 169, 456, 487, 488, 602
;    OTHER INFORMATION: n = A,T,C or G
US-10-060-036-2379

Alignment Scores:
Pred. No.:              9.05e-06        Length:         620
Score:                  84.00           Matches:        16
Percent Similarity:     100.00%         Conservative:   0
Best Local Similarity:  100.00%         Mismatches:     0
Query Match:            100.00%         Indels:         0
DB:                     15              Gaps:           0

US-08-978-217-12 (1-16) x US-10-060-036-2379 (1-620)

Qy          1 LysAsnSerSerGlyTrpLysGluGluGluValLeuGlnSerArgAsn 16
              ||||||||||||||||||||||||||||||||||||||||||||||||
Db         63 AAAAACTCAAGCGGCTGGAAGGAGGAAGAGGTTCTCCAGAGTCGGAAC 110

RESULT 6
US-10-097-340-74
; Sequence 74, Application US/10097340
; Publication No. US20030087250A1
; GENERAL INFORMATION:
;  APPLICANT: John MONAHAN
;  APPLICANT:  Manjula GANNAVARAPU
;  APPLICANT:  Sebastian HOERSCH
;  APPLICANT:  Shubhangi KAMATKAR
;  APPLICANT:  Steve G. KOVATS
;  APPLICANT:  Rachel E. MEYERS
;  APPLICANT:  Michael MORRISEY
;  APPLICANT:  Peter OLANDT
;  APPLICANT:  Ami SEN
;  APPLICANT:  Peter VEIBY
;  APPLICANT:  Gordon B. MILLS
;  APPLICANT:  Robert C. BAST, Jr.
;  APPLICANT:  Karen LU
;  APPLICANT:  Rosemarie SCHMANDT
;  APPLICANT:  Xumei ZHAO
;  APPLICANT:  Karen GLATT
;  TITLE OF INVENTION: Nucleic Acid Molecules and Proteins For The Identification,
;  TITLE OF INVENTION:  Assessment, Prevention, and Therapy of Ovarian Cancer
;  FILE REFERENCE: MRI-030
;  CURRENT APPLICATION NUMBER: US/10/097,340
;  CURRENT FILING DATE:  2002-03-14
;  PRIOR APPLICATION NUMBER: 60/276,025
;  PRIOR FILING DATE: 2001-03-14
;  PRIOR APPLICATION NUMBER: 60/325,149
;  PRIOR FILING DATE: 2001-09-26
;  PRIOR APPLICATION NUMBER: 60/276,026
;  PRIOR FILING DATE: 2001-03-14
;  PRIOR APPLICATION NUMBER: 60/324,967
;  PRIOR FILING DATE: 2001/09/26
;  PRIOR APPLICATION NUMBER: 60/311,732
;  PRIOR FILING DATE: 2001-08-10
;  PRIOR APPLICATION NUMBER: 60/325,102
;  PRIOR FILING DATE: 2001-09-26
;  PRIOR APPLICATION NUMBER: 60/323,580
;  PRIOR FILING DATE: 2001-09-19
;  NUMBER OF SEQ ID NOS: 363
;  SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 74
;    LENGTH: 1907
;    TYPE: DNA
;    ORGANISM: Homo sapiens
US-10-097-340-74

Alignment Scores:
Pred. No.:              3.02e-05        Length:         1907
Score:                  84.00           Matches:        16
Percent Similarity:     100.00%         Conservative:   0
Best Local Similarity:  100.00%         Mismatches:     0
Query Match:            100.00%         Indels:         0
DB:                     15              Gaps:           0

US-08-978-217-12 (1-16) x US-10-097-340-74 (1-1907)

Qy          1 LysAsnSerSerGlyTrpLysGluGluGluValLeuGlnSerArgAsn 16
              ||||||||||||||||||||||||||||||||||||||||||||||||
Db       1161 AAAAACTCAAGCGGCTGGAAGGAGGAAGAGGTTCTCCAGAGTCGGAAC 1208

RESULT 7
US-09-964-824A-101
; Sequence 101, Application US/09964824A
; Patent No. US20020102531A1
; GENERAL INFORMATION:
;  APPLICANT: Horrigan, Stephen
;  TITLE OF INVENTION: Cancer Gene Determination and Therapeutic Screening Using Signatu
;  TITLE OF INVENTION:  Sets
;  FILE REFERENCE: 689290-73
;  CURRENT APPLICATION NUMBER: US/09/964,824A
;  CURRENT FILING DATE:  2001-09-27
;  PRIOR APPLICATION NUMBER: US/60/236,033
;  PRIOR FILING DATE: 2000-09-28
;  PRIOR APPLICATION NUMBER: US/60/236,032
;  PRIOR FILING DATE: 2000-09-28
;  PRIOR APPLICATION NUMBER: US/60/236,028
;  PRIOR FILING DATE: 2000-09-28
;  NUMBER OF SEQ ID NOS: 583
;  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 101
;    LENGTH: 1915
;    TYPE: DNA
;    ORGANISM: Homo sapiens
US-09-964-824A-101

Alignment Scores:
Pred. No.:              3.03e-05        Length:         1915
Score:                  84.00           Matches:        16
Percent Similarity:     100.00%         Conservative:   0
Best Local Similarity:  100.00%         Mismatches:     0
Query Match:            100.00%         Indels:         0
DB:                     10              Gaps:           0

US-08-978-217-12 (1-16) x US-09-964-824A-101 (1-1915)

Qy          1 LysAsnSerSerGlyTrpLysGluGluGluValLeuGlnSerArgAsn 16
              ||||||||||||||||||||||||||||||||||||||||||||||||
Db       1185 AAAAACTCAAGCGGCTGGAAGGAGGAAGAGGTTCTCCAGAGTCGGAAC 1232

RESULT 8
US-09-964-824A-563
; Sequence 563, Application US/09964824A
; Patent No. US20020102531A1
; GENERAL INFORMATION:
;  APPLICANT: Horrigan, Stephen
;  TITLE OF INVENTION: Cancer Gene Determination and Therapeutic Screening Using Signatu
;  TITLE OF INVENTION:  Sets
;  FILE REFERENCE: 689290-73
;  CURRENT APPLICATION NUMBER: US/09/964,824A
;  CURRENT FILING DATE:  2001-09-27
;  PRIOR APPLICATION NUMBER: US/60/236,033
;  PRIOR FILING DATE: 2000-09-28
;  PRIOR APPLICATION NUMBER: US/60/236,032
;  PRIOR FILING DATE: 2000-09-28
;  PRIOR APPLICATION NUMBER: US/60/236,028
;  PRIOR FILING DATE: 2000-09-28
```

```
;  NUMBER OF SEQ ID NOS: 583
;  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 563
;   LENGTH: 1915
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-964-824A-563

Alignment Scores:
Pred. No.:              3.03e-05        Length:         1915
Score:                  84.00           Matches:        16
Percent Similarity:     100.00%         Conservative:   0
Best Local Similarity:  100.00%         Mismatches:     0
Query Match:            100.00%         Indels:         0
DB:                     10              Gaps:           0

US-08-978-217-12 (1-16) x US-09-964-824A-563 (1-1915)

Qy          1 LysAsnSerSerGlyTrpLysGluGluGluValLeuGlnSerArgAsn 16
              ||||||||||||||||||||||||||||||||||||||||||||||||
Db       1185 AAAAACTCAAGCGGCTGGAAGGAGGAAGAGGTTCTCCAGAGTCGGAAC 1232

RESULT 9
US-09-880-107-3420
; Sequence 3420, Application US/09880107
; Patent No. US20020142981A1
; GENERAL INFORMATION:
;  APPLICANT: Horne, Darci T.
;  APPLICANT:  Vockley, Joseph G.
;  APPLICANT:  Scherf, Uwe
;  APPLICANT:  Gene Logic, Inc.
;  TITLE OF INVENTION: Gene Expression Profiles in Liver Cancer
;  FILE REFERENCE: 44921-5028-WO
;  CURRENT APPLICATION NUMBER: US/09/880,107
;  CURRENT FILING DATE:  2001-06-14
;  PRIOR APPLICATION NUMBER: US 60/211,379
;  PRIOR FILING DATE: 2000-06-14
;  PRIOR APPLICATION NUMBER: US 60/237,054
;  PRIOR FILING DATE: 2000-10-02
;  NUMBER OF SEQ ID NOS: 3950
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 3420
;   LENGTH: 1915
;   TYPE: DNA
;   ORGANISM: Homo sapiens
;   FEATURE:
;   OTHER INFORMATION: Genbank Accession No. US20020142981A1 U73843
US-09-880-107-3420

Alignment Scores:
Pred. No.:              3.03e-05        Length:         1915
Score:                  84.00           Matches:        16
Percent Similarity:     100.00%         Conservative:   0
Best Local Similarity:  100.00%         Mismatches:     0
Query Match:            100.00%         Indels:         0
DB:                     10              Gaps:           0

US-08-978-217-12 (1-16) x US-09-880-107-3420 (1-1915)

Qy          1 LysAsnSerSerGlyTrpLysGluGluGluValLeuGlnSerArgAsn 16
              ||||||||||||||||||||||||||||||||||||||||||||||||
Db       1185 AAAAACTCAAGCGGCTGGAAGGAGGAAGAGGTTCTCCAGAGTCGGAAC 1232

RESULT 10
US-09-967-768A-192
; Sequence 192, Application US/09967768A
; Patent No. US20020150877A1
; GENERAL INFORMATION:
;  APPLICANT: Augustus, Meena
;  TITLE OF INVENTION: Cancer Gene Determination and Therapeutic Screening Using Signatu
;  TITLE OF INVENTION:  Sets
;  FILE REFERENCE: 689290-72
;  CURRENT APPLICATION NUMBER: US/09/967,768A
;  CURRENT FILING DATE:  2001-09-28
;  PRIOR APPLICATION NUMBER: US/60/236,109
;  PRIOR FILING DATE: 2000-09-28
;  PRIOR APPLICATION NUMBER: US/60/236,034
;  PRIOR FILING DATE: 2000-09-28
;  PRIOR APPLICATION NUMBER: US/60/236,111
;  PRIOR FILING DATE: 2000-09-28
;  NUMBER OF SEQ ID NOS: 325
;  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 192
;   LENGTH: 1915
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-967-768A-192

Alignment Scores:
Pred. No.:              3.03e-05        Length:         1915
Score:                  84.00           Matches:        16
Percent Similarity:     100.00%         Conservative:   0
Best Local Similarity:  100.00%         Mismatches:     0
Query Match:            100.00%         Indels:         0
DB:                     10              Gaps:           0

US-08-978-217-12 (1-16) x US-09-967-768A-192 (1-1915)

Qy          1 LysAsnSerSerGlyTrpLysGluGluGluValLeuGlnSerArgAsn 16
              ||||||||||||||||||||||||||||||||||||||||||||||||
Db       1185 AAAAACTCAAGCGGCTGGAAGGAGGAAGAGGTTCTCCAGAGTCGGAAC 1232

RESULT 11
US-09-922-217-1105
; Sequence 1105, Application US/09922217
; Patent No. US20020076414A1
; GENERAL INFORMATION:
;  APPLICANT: Xu, Jiangchun
;  APPLICANT:  Lodes, Michael J.
;  APPLICANT:  Secrist, Heather
;  APPLICANT:  Benson, Darin R.
;  APPLICANT:  Meagher, Madeleine Joy
;  APPLICANT:  Stolk, John A.
;  APPLICANT:  Wang, Tongtong
;  APPLICANT:  Jiang, Yuqiu
;  APPLICANT:  Smith, Carole Lynn
;  APPLICANT:  King, Gordon E.
;  APPLICANT:  Wang, Aijun
;  APPLICANT:  Clapper, Jonathan D.
;  TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY AND DIAGNOSIS
;  TITLE OF INVENTION:  OF COLON CANCER AND METHODS FOR THEIR USE
;  FILE REFERENCE: 210121.471C13
;  CURRENT APPLICATION NUMBER: US/09/922,217
;  CURRENT FILING DATE:  2001-08-03
;  NUMBER OF SEQ ID NOS: 1124
;  SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 1105
;   LENGTH: 1917
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-922-217-1105

Alignment Scores:
Pred. No.:              3.03e-05        Length:         1917
Score:                  84.00           Matches:        16
Percent Similarity:     100.00%         Conservative:   0
Best Local Similarity:  100.00%         Mismatches:     0
Query Match:            100.00%         Indels:         0
DB:                     9               Gaps:           0

US-08-978-217-12 (1-16) x US-09-922-217-1105 (1-1917)

Qy          1 LysAsnSerSerGlyTrpLysGluGluGluValLeuGlnSerArgAsn 16
              ||||||||||||||||||||||||||||||||||||||||||||||||
Db       1187 AAAAACTCAAGCGGCTGGAAGGAGGAAGAGGTTCTCCAGAGTCGGAAC 1234
```

```
RESULT 12
US-10-025-380-1105
; Sequence 1105, Application US/10025380
; Publication No. US20020182191A1
; GENERAL INFORMATION:
;  APPLICANT: Xu, Jiangchun
;  APPLICANT:  Lodes, Michael J.
;  APPLICANT:  Secrist, Heather
;  APPLICANT:  Benson, Darin R.
;  APPLICANT:  Meagher, Madeleine Joy
;  APPLICANT:  Stolk, John A.
;  APPLICANT:  Wang, Tongtong
;  APPLICANT:  Jiang, Yuqiu
;  APPLICANT:  Smith, Carole L.
;  APPLICANT:  King, Gordon E.
;  APPLICANT:  Wang, Aijun
;  APPLICANT:  Clapper, Jonathan D.
;  APPLICANT:  Skeiky, Yasir A. W.
;  APPLICANT:  Fanger, Gary R.
;  APPLICANT:  Vedvick Thomas S.
;  APPLICANT:  Carter, Darrick
;  TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY AND DIAGNOSIS
;  TITLE OF INVENTION:  OF COLON CANCER AND METHODS FOR THEIR USE
;  FILE REFERENCE: 210121.471C14
;  CURRENT APPLICATION NUMBER: US/10/025,380
;  CURRENT FILING DATE:  2001-12-19
;  NUMBER OF SEQ ID NOS: 1129
;  SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 1105
;   LENGTH: 1917
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-10-025-380-1105

Alignment Scores:
Pred. No.:              3.03e-05      Length:          1917
Score:                  84.00         Matches:         16
Percent Similarity:     100.00%       Conservative:    0
Best Local Similarity:  100.00%       Mismatches:      0
Query Match:            100.00%       Indels:          0
DB:                     14            Gaps:            0

US-08-978-217-12 (1-16) x US-10-025-380-1105 (1-1917)

Qy          1 LysAsnSerSerGlyTrpLysGluGluGluValLeuGlnSerArgAsn 16
              ||||||||||||||||||||||||||||||||||||||||||||||||
Db       1187 AAAAACTCAAGCGGCTGGAAGGAGGAAGAGGTTCTCCAGAGTCGGAAC 1234

RESULT 13
US-10-264-049-756
; Sequence 756, Application US/10264049
; Publication No. US20040005579A1
; GENERAL INFORMATION:
;  APPLICANT: Birse et al.
;  TITLE OF INVENTION: Nucleic Acids, Proteins, and Antibodies
;  FILE REFERENCE: PA133P1
;  CURRENT APPLICATION NUMBER: US/10/264,049
;  CURRENT FILING DATE:  2002-10-04
;  PRIOR APPLICATION NUMBER: PCT/US01/18569
;  PRIOR FILING DATE: 2001-06-07
;  PRIOR APPLICATION NUMBER: US 60/209,467
;  PRIOR FILING DATE: 2000-06-07
;  NUMBER OF SEQ ID NOS: 4360
;  SOFTWARE: PatentIn Ver. 3.1
; SEQ ID NO 756
;   LENGTH: 1956
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-10-264-049-756

Alignment Scores:
Pred. No.:              3.1e-05       Length:          1956
Score:                  84.00         Matches:         16
Percent Similarity:     100.00%       Conservative:    0
Best Local Similarity:  100.00%       Mismatches:      0
Query Match:            100.00%       Indels:          0
DB:                     12            Gaps:            0

US-08-978-217-12 (1-16) x US-10-264-049-756 (1-1956)

Qy          1 LysAsnSerSerGlyTrpLysGluGluGluValLeuGlnSerArgAsn 16
              ||||||||||||||||||||||||||||||||||||||||||||||||
Db       1226 AAAAACTCAAGCGGCTGGAAGGAGGAAGAGGTTCTCCAGAGTCGGAAC 1273

RESULT 14
US-09-925-301-207
; Sequence 207, Application US/09925301
; Patent No. US20020052308A1
; GENERAL INFORMATION:
;  APPLICANT: Rosen et al.
;  TITLE OF INVENTION: Nucleic Acids, Proteins and Antibodies
;  FILE REFERENCE: PA106
;  CURRENT APPLICATION NUMBER: US/09/925,301
;  CURRENT FILING DATE:  2001-08-10
;  PRIOR APPLICATION NUMBER: PCT/US00/05882
;  PRIOR FILING DATE: 2000-03-08
;  PRIOR APPLICATION NUMBER: 60/124,270
;  PRIOR FILING DATE: 1999-03-12
;  NUMBER OF SEQ ID NOS: 1694
;  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 207
;   LENGTH: 1996
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-925-301-207

Alignment Scores:
Pred. No.:              3.17e-05      Length:          1996
Score:                  84.00         Matches:         16
Percent Similarity:     100.00%       Conservative:    0
Best Local Similarity:  100.00%       Mismatches:      0
Query Match:            100.00%       Indels:          0
DB:                     9             Gaps:            0

US-08-978-217-12 (1-16) x US-09-925-301-207 (1-1996)

Qy          1 LysAsnSerSerGlyTrpLysGluGluGluValLeuGlnSerArgAsn 16
              ||||||||||||||||||||||||||||||||||||||||||||||||
Db       1206 AAAAACTCAAGCGGCTGGAAGGAGGAAGAGGTTCTCCAGAGTCGGAAC 1253

RESULT 15
US-10-131-410-64
; Sequence 64, Application US/10131410
; Publication No. US20030235915A1
; GENERAL INFORMATION:
;  APPLICANT: SPECHT, THOMAS
;  APPLICANT:  HINZMANN, BERND
;  APPLICANT:  SCHMITT, ARMIN
;  APPLICANT:  PILARSKY, CHRISTIAN
;  APPLICANT:  DAHL, EDGAR
;  APPLICANT:  ROSENTHAL, ANDRE
;  TITLE OF INVENTION: HUMAN NUCLEIC ACID SEQUENCES FROM TISSUE OF BREAST
;  TITLE OF INVENTION:  TUMORS
;  FILE REFERENCE: SCH-1763
;  CURRENT APPLICATION NUMBER: US/10/131,410
;  CURRENT FILING DATE:  2002-04-25
;  PRIOR APPLICATION NUMBER: 09/646,673
;  PRIOR FILING DATE: 2000-09-20
;  PRIOR APPLICATION NUMBER: PCT/DE99/00908
;  PRIOR FILING DATE: 1999-03-19
;  NUMBER OF SEQ ID NOS: 202
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 64
;   LENGTH: 2269
;   TYPE: DNA
;   ORGANISM: Homo sapiens
```

US-10-131-410-64

Alignment Scores:

Pred. No.:	3.63e-05	Length:	2269
Score:	84.00	Matches:	16
Percent Similarity:	100.00%	Conservative:	0
Best Local Similarity:	100.00%	Mismatches:	0
Query Match:	100.00%	Indels:	0
DB:	12	Gaps:	0

US-08-978-217-12 (1-16) x US-10-131-410-64 (1-2269)

```
Qy          1 LysAsnSerSerGlyTrpLysGluGluGluValLeuGlnSerArgAsn 16
              ||||||||||||||||||||||||||||||||||||||||||||||||
Db        916 AAAAACTCAAGCGGCTGGAAGGAGGAAGAGGTTCTCCAGAGTCGGAAC 963
```

Search completed: February 13, 2004, 01:46:08
Job time : 28.2461 secs

GenCore version 5.1.6

OM protein - nucleic search, using frame_plus_p2n model

Run on: February 12, 2004, 21:34:51 ; Search time 132.542 Seconds
(without alignments)
2334.540 Million cell updates/sec

Title: US-08-978-217-7
Perfect score: 445
Sequence: 1 NCALEELRLVFGPLGDQLHA.....ELLDDGQQASPYHPGSCGAG 84

Scoring table: BLOSUM62
Xgapop 10.0 , Xgapext 0.5
Ygapop 10.0 , Ygapext 0.5
Fgapop 6.0 , Fgapext 7.0
Delop 6.0 , Delext 7.0

Searched: 2449703 seqs, 1841816367 residues

Total number of hits satisfying chosen parameters: 4899406

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Command line parameters:
-MODEL=frame+_p2n.model -DEV=xlh
-Q=/cgn2_1/USPTO_spool/US08978217/runat_10022004_133827_20514/app_query.fasta_1.1500
-DB=Published_Applications_NA -QFMT=fastap -SUFFIX=rnpb -MINMATCH=0.1
-LOOPCL=0 -LOOPEXT=0 -UNITS=bits -START=1 -END=-1 -MATRIX=blosum62
-TRANS=human40.cdi -LIST=45 -DOCALIGN=200 -THR_SCORE=pct -THR_MAX=100
-THR_MIN=0 -ALIGN=15 -MODE=LOCAL -OUTFMT=pto -NORM=ext -HEAPSIZE=500 -MINLEN=0
-MAXLEN=2000000000 -USER=US08978217_@CGN_1_1_690_@runat_10022004_133827_20514
-NCPU=6 -ICPU=3 -NO_MMAP -LARGEQUERY -NEG_SCORES=0 -WAIT -DSPBLOCK=100
-LONGLOG -DEV_TIMEOUT=120 -WARN_TIMEOUT=30 -THREADS=1 -XGAPOP=10 -XGAPEXT=0.5
-FGAPOP=6 -FGAPEXT=7 -YGAPOP=10 -YGAPEXT=0.5 -DELOP=6 -DELEXT=7

Database : Published_Applications_NA:*
1: /cgn2_6/ptodata/1/pubpna/US07_PUBCOMB.seq:*
2: /cgn2_6/ptodata/1/pubpna/PCT_NEW_PUB.seq:*
3: /cgn2_6/ptodata/1/pubpna/US06_NEW_PUB.seq:*
4: /cgn2_6/ptodata/1/pubpna/US06_PUBCOMB.seq:*
5: /cgn2_6/ptodata/1/pubpna/US07_NEW_PUB.seq:*
6: /cgn2_6/ptodata/1/pubpna/PCTUS_PUBCOMB.seq:*
7: /cgn2_6/ptodata/1/pubpna/US08_NEW_PUB.seq:*
8: /cgn2_6/ptodata/1/pubpna/US08_PUBCOMB.seq:*
9: /cgn2_6/ptodata/1/pubpna/US09A_PUBCOMB.seq:*
10: /cgn2_6/ptodata/1/pubpna/US09B_PUBCOMB.seq:*
11: /cgn2_6/ptodata/1/pubpna/US09C_PUBCOMB.seq:*
12: /cgn2_6/ptodata/1/pubpna/US09_NEW_PUB.seq:*
13: /cgn2_6/ptodata/1/pubpna/US09_NEW_PUB.seq2:*
14: /cgn2_6/ptodata/1/pubpna/US10A_PUBCOMB.seq:*
15: /cgn2_6/ptodata/1/pubpna/US10B_PUBCOMB.seq:*
16: /cgn2_6/ptodata/1/pubpna/US10_NEW_PUB.seq:*
17: /cgn2_6/ptodata/1/pubpna/US60_NEW_PUB.seq:*
18: /cgn2_6/ptodata/1/pubpna/US60_PUBCOMB.seq:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
c 1	445	100.0	563	9	US-09-922-217-944	Sequence 944, App
c 2	445	100.0	563	10	US-09-833-263-944	Sequence 944, App
c 3	445	100.0	563	14	US-10-025-380-944	Sequence 944, App
c 4	445	100.0	626	9	US-09-922-217-853	Sequence 853, App
c 5	445	100.0	626	10	US-09-833-263-853	Sequence 853, App
c 6	445	100.0	626	14	US-10-025-380-853	Sequence 853, App
7	445	100.0	1907	15	US-10-097-340-74	Sequence 74, Appl
8	445	100.0	1915	10	US-09-964-824A-101	Sequence 101, App
9	445	100.0	1915	10	US-09-964-824A-563	Sequence 563, App
10	445	100.0	1915	10	US-09-880-107-3420	Sequence 3420, Ap
11	445	100.0	1915	10	US-09-967-768A-192	Sequence 192, App
12	445	100.0	1917	9	US-09-922-217-1105	Sequence 1105, Ap
13	445	100.0	1917	14	US-10-025-380-1105	Sequence 1105, Ap
14	445	100.0	1956	12	US-10-264-049-756	Sequence 756, App
15	445	100.0	1996	9	US-09-925-301-207	Sequence 207, App
16	445	100.0	2269	12	US-10-131-410-64	Sequence 64, Appl
17	439	98.7	355	10	US-09-867-701-4818	Sequence 4818, Ap
c 18	305	68.5	174	10	US-09-998-598-1740	Sequence 1740, Ap
c 19	111	24.9	437	10	US-09-998-598-2216	Sequence 2216, Ap
20	84	18.9	641	13	US-10-027-632-199194	Sequence 199194,
21	84	18.9	641	13	US-10-027-632-199195	Sequence 199195,
22	84	18.9	641	13	US-10-027-632-199196	Sequence 199196,
23	84	18.9	641	13	US-10-027-632-199197	Sequence 199197,
24	84	18.9	641	13	US-10-027-632-199198	Sequence 199198,
25	84	18.9	641	14	US-10-027-632-199194	Sequence 199194,
26	84	18.9	641	14	US-10-027-632-199195	Sequence 199195,
27	84	18.9	641	14	US-10-027-632-199196	Sequence 199196,
28	84	18.9	641	14	US-10-027-632-199197	Sequence 199197,
29	84	18.9	641	14	US-10-027-632-199198	Sequence 199198,
30	73.5	16.5	1341	15	US-10-156-761-5009	Sequence 5009, Ap
c 31	73.5	16.5	9025608	15	US-10-156-761-1	Sequence 1, Appli
32	73	16.4	1005	12	US-10-369-493-40562	Sequence 40562, A
c 33	72	16.2	353	9	US-09-864-761-3195	Sequence 3195, Ap
c 34	72	16.2	398	10	US-09-854-133-697	Sequence 697, App
c 35	72	16.2	398	15	US-10-144-649A-697	Sequence 697, App
c 36	72	16.2	407	11	US-09-918-995-36824	Sequence 36824, A
c 37	72	16.2	410	11	US-09-918-995-16413	Sequence 16413, A
c 38	72	16.2	521	10	US-09-884-441-139	Sequence 139, App
c 39	72	16.2	521	11	US-09-907-969-139	Sequence 139, App
c 40	72	16.2	521	13	US-09-827-271-139	Sequence 139, App
c 41	72	16.2	521	15	US-10-198-053-139	Sequence 139, App
c 42	72	16.2	551	10	US-09-884-441-92	Sequence 92, Appl
c 43	72	16.2	551	11	US-09-907-969-92	Sequence 92, Appl
c 44	72	16.2	551	13	US-09-827-271-92	Sequence 92, Appl
c 45	72	16.2	551	15	US-10-198-053-92	Sequence 92, Appl

ALIGNMENTS

RESULT 1
US-09-922-217-944/c
; Sequence 944, Application US/09922217
; Patent No. US20020076414A1
; GENERAL INFORMATION:
; APPLICANT: Xu, Jiangchun
; APPLICANT: Lodes, Michael J.
; APPLICANT: Secrist, Heather
; APPLICANT: Benson, Darin R.
; APPLICANT: Meagher, Madeleine Joy
; APPLICANT: Stolk, John A.
; APPLICANT: Wang, Tongtong
; APPLICANT: Jiang, Yuqiu
; APPLICANT: Smith, Carole Lynn
; APPLICANT: King, Gordon E.
; APPLICANT: Wang, Aijun
; APPLICANT: Clapper, Jonathan D.
; TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY AND DIAGNOSIS
; TITLE OF INVENTION: OF COLON CANCER AND METHODS FOR THEIR USE
; FILE REFERENCE: 210121.471C13
; CURRENT APPLICATION NUMBER: US/09/922,217
; CURRENT FILING DATE: 2001-08-03
; NUMBER OF SEQ ID NOS: 1124
; SOFTWARE: FastSEQ for Windows Version 4.0

```
; SEQ ID NO 944
;   LENGTH: 563
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-922-217-944

Alignment Scores:
Pred. No.:                1.02e-55        Length:         563
Score:                    445.00          Matches:        84
Percent Similarity:       100.00%         Conservative:   0
Best Local Similarity:    100.00%         Mismatches:     0
Query Match:              100.00%         Indels:         0
DB:                       9               Gaps:           0

US-08-978-217-7 (1-84) x US-09-922-217-944 (1-563)

Qy          1 AsnCysAlaLeuGluGluLeuArgLeuValPheGlyProLeuGlyAspGlnLeuHisAla 20
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        472 AATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGCCTCTGGGGGACCAACTCCATGCC 413

Qy         21 GlnLeuArgAspLeuThrSerSerSerSerAspGluLeuSerTrpIleIleGluLeuLeu 40
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        412 CAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATTGAGCTGCTG 353

Qy         41 GluLysAspGlyMetAlaPheGlnGluAlaLeuAspProGlyProPheAspGlnGlySer 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        352 GAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCCTTTGACCAGGGCAGC 293

Qy         61 ProPheAlaGlnGluLeuLeuAspAspGlyGlnGlnAlaSerProTyrHisProGlySer 80
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        292 CCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCACCCCGGCAGC 233

Qy         81 CysGlyAlaGly 84
              ||||||||||||
Db        232 TGTGGCGCAGGA 221

RESULT 2
US-09-833-263-944/c
; Sequence 944, Application US/09833263
; Patent No. US20020110547A1
; GENERAL INFORMATION:
;  APPLICANT: Wang, Aijun
;  APPLICANT:  Clapper, Jonathan D.
;  APPLICANT:  Stolk, John A.
;  APPLICANT:  Meagher, Madeleine J.
;  TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY AND
;  TITLE OF INVENTION:  DIAGNOSIS OF COLON CANCER AND METHODS FOR THEIR USE
;  FILE REFERENCE: 210121.471C12
;  CURRENT APPLICATION NUMBER: US/09/833,263
;  CURRENT FILING DATE:  2001-04-10
;  NUMBER OF SEQ ID NOS: 1093
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 944
;   LENGTH: 563
;   TYPE: DNA
;   ORGANISM: Homo sapien
US-09-833-263-944

Alignment Scores:
Pred. No.:                1.02e-55        Length:         563
Score:                    445.00          Matches:        84
Percent Similarity:       100.00%         Conservative:   0
Best Local Similarity:    100.00%         Mismatches:     0
Query Match:              100.00%         Indels:         0
DB:                       10              Gaps:           0

US-08-978-217-7 (1-84) x US-09-833-263-944 (1-563)

Qy          1 AsnCysAlaLeuGluGluLeuArgLeuValPheGlyProLeuGlyAspGlnLeuHisAla 20
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        472 AATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGCCTCTGGGGGACCAACTCCATGCC 413

Qy         21 GlnLeuArgAspLeuThrSerSerSerSerAspGluLeuSerTrpIleIleGluLeuLeu 40
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        412 CAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATTGAGCTGCTG 353

Qy         41 GluLysAspGlyMetAlaPheGlnGluAlaLeuAspProGlyProPheAspGlnGlySer 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        352 GAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCCTTTGACCAGGGCAGC 293

Qy         61 ProPheAlaGlnGluLeuLeuAspAspGlyGlnGlnAlaSerProTyrHisProGlySer 80
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        292 CCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCACCCCGGCAGC 233

Qy         81 CysGlyAlaGly 84
              ||||||||||||
Db        232 TGTGGCGCAGGA 221

RESULT 3
US-10-025-380-944/c
; Sequence 944, Application US/10025380
; Publication No. US20020182191A1
; GENERAL INFORMATION:
;  APPLICANT: Xu, Jiangchun
;  APPLICANT:  Lodes, Michael J.
;  APPLICANT:  Secrist, Heather
;  APPLICANT:  Benson, Darin R.
;  APPLICANT:  Meagher, Madeleine Joy
;  APPLICANT:  Stolk, John A.
;  APPLICANT:  Wang, Tongtong
;  APPLICANT:  Jiang, Yuqiu
;  APPLICANT:  Smith, Carole L.
;  APPLICANT:  King, Gordon E.
;  APPLICANT:  Wang, Aijun
;  APPLICANT:  Clapper, Jonathan D.
;  APPLICANT:  Skeiky, Yasir A. W.
;  APPLICANT:  Fanger, Gary R.
;  APPLICANT:  Vedvick Thomas S.
;  APPLICANT:  Carter, Darrick
;  TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY AND DIAGNOSIS
;  TITLE OF INVENTION:  OF COLON CANCER AND METHODS FOR THEIR USE
;  FILE REFERENCE: 210121.471C14
;  CURRENT APPLICATION NUMBER: US/10/025,380
;  CURRENT FILING DATE:  2001-12-19
;  NUMBER OF SEQ ID NOS: 1129
;  SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 944
;   LENGTH: 563
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-10-025-380-944

Alignment Scores:
Pred. No.:                1.02e-55        Length:         563
Score:                    445.00          Matches:        84
Percent Similarity:       100.00%         Conservative:   0
Best Local Similarity:    100.00%         Mismatches:     0
Query Match:              100.00%         Indels:         0
DB:                       14              Gaps:           0

US-08-978-217-7 (1-84) x US-10-025-380-944 (1-563)

Qy          1 AsnCysAlaLeuGluGluLeuArgLeuValPheGlyProLeuGlyAspGlnLeuHisAla 20
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        472 AATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGCCTCTGGGGGACCAACTCCATGCC 413

Qy         21 GlnLeuArgAspLeuThrSerSerSerSerAspGluLeuSerTrpIleIleGluLeuLeu 40
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        412 CAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATTGAGCTGCTG 353

Qy         41 GluLysAspGlyMetAlaPheGlnGluAlaLeuAspProGlyProPheAspGlnGlySer 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        352 GAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCCTTTGACCAGGGCAGC 293

Qy         61 ProPheAlaGlnGluLeuLeuAspAspGlyGlnGlnAlaSerProTyrHisProGlySer 80
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        292 CCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCACCCCGGCAGC 233

Qy         81 CysGlyAlaGly 84
              ||||||||||||
Db        232 TGTGGCGCAGGA 221
```

```
Db        292 CCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCACCCCGGCAGC 233

Qy         81 CysGlyAlaGly 84
              ||||||||||||
Db        232 TGTGGCGCAGGA 221

RESULT 4
US-09-922-217-853/c
; Sequence 853, Application US/09922217
; Patent No. US20020076414A1
; GENERAL INFORMATION:
;  APPLICANT: Xu, Jiangchun
;  APPLICANT:  Lodes, Michael J.
;  APPLICANT:  Secrist, Heather
;  APPLICANT:  Benson, Darin R.
;  APPLICANT:  Meagher, Madeleine Joy
;  APPLICANT:  Stolk, John A.
;  APPLICANT:  Wang, Tongtong
;  APPLICANT:  Jiang, Yuqiu
;  APPLICANT:  Smith, Carole Lynn
;  APPLICANT:  King, Gordon E.
;  APPLICANT:  Wang, Aijun
;  APPLICANT:  Clapper, Jonathan D.
;  TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY AND DIAGNOSIS
;  TITLE OF INVENTION:  OF COLON CANCER AND METHODS FOR THEIR USE
;  FILE REFERENCE: 210121.471C13
;  CURRENT APPLICATION NUMBER: US/09/922,217
;  CURRENT FILING DATE:  2001-08-03
;  NUMBER OF SEQ ID NOS: 1124
;  SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 853
;   LENGTH: 626
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-922-217-853

Alignment Scores:
Pred. No.:              1.16e-55        Length:         626
Score:                  445.00          Matches:        84
Percent Similarity:     100.00%         Conservative:   0
Best Local Similarity:  100.00%         Mismatches:     0
Query Match:            100.00%         Indels:         0
DB:                     9               Gaps:           0

US-08-978-217-7 (1-84) x US-09-922-217-853 (1-626)

Qy          1 AsnCysAlaLeuGluGluLeuArgLeuValPheGlyProLeuGlyAspGlnLeuHisAla 20
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        471 AATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGCCTCTGGGGGACCAACTCCATGCC 412

Qy         21 GlnLeuArgAspLeuThrSerSerSerSerAspGluLeuSerTrpIleIleGluLeuLeu 40
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        411 CAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATTGAGCTGCTG 352

Qy         41 GluLysAspGlyMetAlaPheGlnGluAlaLeuAspProGlyProPheAspGlnGlySer 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        351 GAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCCTTTGACCAGGGCAGC 292

Qy         61 ProPheAlaGlnGluLeuLeuAspAspGlyGlnGlnAlaSerProTyrHisProGlySer 80
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        291 CCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCACCCCGGCAGC 232

Qy         81 CysGlyAlaGly 84
              ||||||||||||
Db        231 TGTGGCGCAGGA 220

RESULT 5
US-09-833-263-853/c
; Sequence 853, Application US/09833263
; Patent No. US20020110547A1
; GENERAL INFORMATION:
;  APPLICANT: Wang, Aijun
;  APPLICANT:  Clapper, Jonathan D.
;  APPLICANT:  Stolk, John A.
;  APPLICANT:  Meagher, Madeleine J.
;  TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY AND
;  TITLE OF INVENTION:  DIAGNOSIS OF COLON CANCER AND METHODS FOR THEIR USE
;  FILE REFERENCE: 210121.471C12
;  CURRENT APPLICATION NUMBER: US/09/833,263
;  CURRENT FILING DATE:  2001-04-10
;  NUMBER OF SEQ ID NOS: 1093
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 853
;   LENGTH: 626
;   TYPE: DNA
;   ORGANISM: Homo sapien
US-09-833-263-853

Alignment Scores:
Pred. No.:              1.16e-55        Length:         626
Score:                  445.00          Matches:        84
Percent Similarity:     100.00%         Conservative:   0
Best Local Similarity:  100.00%         Mismatches:     0
Query Match:            100.00%         Indels:         0
DB:                     10              Gaps:           0

US-08-978-217-7 (1-84) x US-09-833-263-853 (1-626)

Qy          1 AsnCysAlaLeuGluGluLeuArgLeuValPheGlyProLeuGlyAspGlnLeuHisAla 20
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        471 AATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGCCTCTGGGGGACCAACTCCATGCC 412

Qy         21 GlnLeuArgAspLeuThrSerSerSerSerAspGluLeuSerTrpIleIleGluLeuLeu 40
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        411 CAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATTGAGCTGCTG 352

Qy         41 GluLysAspGlyMetAlaPheGlnGluAlaLeuAspProGlyProPheAspGlnGlySer 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        351 GAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCCTTTGACCAGGGCAGC 292

Qy         61 ProPheAlaGlnGluLeuLeuAspAspGlyGlnGlnAlaSerProTyrHisProGlySer 80
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        291 CCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCACCCCGGCAGC 232

Qy         81 CysGlyAlaGly 84
              ||||||||||||
Db        231 TGTGGCGCAGGA 220

RESULT 6
US-10-025-380-853/c
; Sequence 853, Application US/10025380
; Publication No. US20020182191A1
; GENERAL INFORMATION:
;  APPLICANT: Xu, Jiangchun
;  APPLICANT:  Lodes, Michael J.
;  APPLICANT:  Secrist, Heather
;  APPLICANT:  Benson, Darin R.
;  APPLICANT:  Meagher, Madeleine Joy
;  APPLICANT:  Stolk, John A.
;  APPLICANT:  Wang, Tongtong
;  APPLICANT:  Jiang, Yuqiu
;  APPLICANT:  Smith, Carole L.
;  APPLICANT:  King, Gordon E.
;  APPLICANT:  Wang, Aijun
;  APPLICANT:  Clapper, Jonathan D.
;  APPLICANT:  Skeiky, Yasir A. W.
;  APPLICANT:  Fanger, Gary R.
;  APPLICANT:  Vedvick Thomas S.
;  APPLICANT:  Carter, Darrick
;  TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY AND DIAGNOSIS
;  TITLE OF INVENTION:  OF COLON CANCER AND METHODS FOR THEIR USE
;  FILE REFERENCE: 210121.471C14
;  CURRENT APPLICATION NUMBER: US/10/025,380
;  CURRENT FILING DATE:  2001-12-19
;  NUMBER OF SEQ ID NOS: 1129
;  SOFTWARE: FastSEQ for Windows Version 4.0
```

```
; SEQ ID NO 853
;   LENGTH: 626
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-10-025-380-853

Alignment Scores:
Pred. No.:              1.16e-55        Length:         626
Score:                  445.00          Matches:        84
Percent Similarity:     100.00%         Conservative:   0
Best Local Similarity:  100.00%         Mismatches:     0
Query Match:            100.00%         Indels:         0
DB:                     14              Gaps:           0

US-08-978-217-7 (1-84) x US-10-025-380-853 (1-626)

Qy          1 AsnCysAlaLeuGluGluLeuArgLeuValPheGlyProLeuGlyAspGlnLeuHisAla 20
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        471 AATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGCCTCTGGGGGACCAACTCCATGCC 412

Qy         21 GlnLeuArgAspLeuThrSerSerSerSerAspGluLeuSerTrpIleIleGluLeuLeu 40
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        411 CAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATTGAGCTGCTG 352

Qy         41 GluLysAspGlyMetAlaPheGlnGluAlaLeuAspProGlyProPheAspGlnGlySer 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        351 GAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCCTTTGACCAGGGCAGC 292

Qy         61 ProPheAlaGlnGluLeuLeuAspAspGlyGlnGlnAlaSerProTyrHisProGlySer 80
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        291 CCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCACCCCGGCAGC 232

Qy         81 CysGlyAlaGly 84
              ||||||||||||
Db        231 TGTGGCGCAGGA 220

RESULT 7
US-10-097-340-74
; Sequence 74, Application US/10097340
; Publication No. US20030087250A1
; GENERAL INFORMATION:
;  APPLICANT: John MONAHAN
;  APPLICANT:  Manjula GANNAVARAPU
;  APPLICANT:  Sebastian HOERSCH
;  APPLICANT:  Shubhangi KAMATKAR
;  APPLICANT:  Steve G. KOVATS
;  APPLICANT:  Rachel E. MEYERS
;  APPLICANT:  Michael MORRISEY
;  APPLICANT:  Peter OLANDT
;  APPLICANT:  Ami SEN
;  APPLICANT:  Peter VEIBY
;  APPLICANT:  Gordon B. MILLS
;  APPLICANT:  Robert C. BAST, Jr.
;  APPLICANT:  Karen LU
;  APPLICANT:  Rosemarie SCHMANDT
;  APPLICANT:  Xumei ZHAO
;  APPLICANT:  Karen GLATT
;  TITLE OF INVENTION: Nucleic Acid Molecules and Proteins For The Identification,
;  TITLE OF INVENTION:  Assessment, Prevention, and Therapy of Ovarian Cancer
;  FILE REFERENCE: MRI-030
;  CURRENT APPLICATION NUMBER: US/10/097,340
;  CURRENT FILING DATE:  2002-03-14
;  PRIOR APPLICATION NUMBER: 60/276,025
;  PRIOR FILING DATE: 2001-03-14
;  PRIOR APPLICATION NUMBER: 60/325,149
;  PRIOR FILING DATE: 2001-09-26
;  PRIOR APPLICATION NUMBER: 60/276,026
;  PRIOR FILING DATE: 2001-03-14
;  PRIOR APPLICATION NUMBER: 60/324,967
;  PRIOR FILING DATE: 2001/09/26
;  PRIOR APPLICATION NUMBER: 60/311,732
;  PRIOR FILING DATE: 2001-08-10
;  PRIOR APPLICATION NUMBER: 60/325,102
;  PRIOR FILING DATE: 2001-09-26
;  PRIOR APPLICATION NUMBER: 60/323,580
;  PRIOR FILING DATE: 2001-09-19
;  NUMBER OF SEQ ID NOS: 363
;  SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 74
;   LENGTH: 1907
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-10-097-340-74

Alignment Scores:
Pred. No.:              4.83e-55        Length:         1907
Score:                  445.00          Matches:        84
Percent Similarity:     100.00%         Conservative:   0
Best Local Similarity:  100.00%         Mismatches:     0
Query Match:            100.00%         Indels:         0
DB:                     15              Gaps:           0

US-08-978-217-7 (1-84) x US-10-097-340-74 (1-1907)

Qy          1 AsnCysAlaLeuGluGluLeuArgLeuValPheGlyProLeuGlyAspGlnLeuHisAla 20
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        405 AATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGCCTCTGGGGGACCAACTCCATGCC 464

Qy         21 GlnLeuArgAspLeuThrSerSerSerSerAspGluLeuSerTrpIleIleGluLeuLeu 40
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        465 CAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATTGAGCTGCTG 524

Qy         41 GluLysAspGlyMetAlaPheGlnGluAlaLeuAspProGlyProPheAspGlnGlySer 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        525 GAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCCTTTGACCAGGGCAGC 584

Qy         61 ProPheAlaGlnGluLeuLeuAspAspGlyGlnGlnAlaSerProTyrHisProGlySer 80
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        585 CCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCACCCCGGCAGC 644

Qy         81 CysGlyAlaGly 84
              ||||||||||||
Db        645 TGTGGCGCAGGA 656

RESULT 8
US-09-964-824A-101
; Sequence 101, Application US/09964824A
; Patent No. US20020102531A1
; GENERAL INFORMATION:
;  APPLICANT: Horrigan, Stephen
;  TITLE OF INVENTION: Cancer Gene Determination and Therapeutic Screening Using Signati
;  TITLE OF INVENTION:  Sets
;  FILE REFERENCE: 689290-73
;  CURRENT APPLICATION NUMBER: US/09/964,824A
;  CURRENT FILING DATE:  2001-09-27
;  PRIOR APPLICATION NUMBER: US/60/236,033
;  PRIOR FILING DATE: 2000-09-28
;  PRIOR APPLICATION NUMBER: US/60/236,032
;  PRIOR FILING DATE: 2000-09-28
;  PRIOR APPLICATION NUMBER: US/60/236,028
;  PRIOR FILING DATE: 2000-09-28
;  NUMBER OF SEQ ID NOS: 583
;  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 101
;   LENGTH: 1915
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-964-824A-101

Alignment Scores:
Pred. No.:              4.86e-55        Length:         1915
Score:                  445.00          Matches:        84
Percent Similarity:     100.00%         Conservative:   0
Best Local Similarity:  100.00%         Mismatches:     0
Query Match:            100.00%         Indels:         0
DB:                     10              Gaps:           0
```

```
US-08-978-217-7 (1-84) x US-09-964-824A-101 (1-1915)

Qy          1 AsnCysAlaLeuGluGluLeuArgLeuValPheGlyProLeuGlyAspGlnLeuHisAla 20
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        429 AATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGCCTCTGGGGGACCAACTCCATGCC 488

Qy         21 GlnLeuArgAspLeuThrSerSerSerSerAspGluLeuSerTrpIleIleGluLeuLeu 40
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        489 CAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATTGAGCTGCTG 548

Qy         41 GluLysAspGlyMetAlaPheGlnGluAlaLeuAspProGlyProPheAspGlnGlySer 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        549 GAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCCTTTGACCAGGGCAGC 608

Qy         61 ProPheAlaGlnGluLeuLeuAspAspGlyGlnGlnAlaSerProTyrHisProGlySer 80
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        609 CCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCACCCCGGCAGC 668

Qy         81 CysGlyAlaGly 84
              ||||||||||||
Db        669 TGTGGCGCAGGA 680

RESULT 9
US-09-964-824A-563
; Sequence 563, Application US/09964824A
; Patent No. US20020102531A1
; GENERAL INFORMATION:
;  APPLICANT: Horrigan, Stephen
;  TITLE OF INVENTION: Cancer Gene Determination and Therapeutic Screening Using Signatu
;  TITLE OF INVENTION:  Sets
;  FILE REFERENCE: 689290-73
;  CURRENT APPLICATION NUMBER: US/09/964,824A
;  CURRENT FILING DATE:  2001-09-27
;  PRIOR APPLICATION NUMBER: US/60/236,033
;  PRIOR FILING DATE: 2000-09-28
;  PRIOR APPLICATION NUMBER: US/60/236,032
;  PRIOR FILING DATE: 2000-09-28
;  PRIOR APPLICATION NUMBER: US/60/236,028
;  PRIOR FILING DATE: 2000-09-28
;  NUMBER OF SEQ ID NOS: 583
;  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 563
;   LENGTH: 1915
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-964-824A-563

Alignment Scores:
Pred. No.:              4.86e-55       Length:          1915
Score:                  445.00         Matches:         84
Percent Similarity:     100.00%        Conservative:    0
Best Local Similarity:  100.00%        Mismatches:      0
Query Match:            100.00%        Indels:          0
DB:                     10             Gaps:            0

US-08-978-217-7 (1-84) x US-09-964-824A-563 (1-1915)

Qy          1 AsnCysAlaLeuGluGluLeuArgLeuValPheGlyProLeuGlyAspGlnLeuHisAla 20
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        429 AATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGCCTCTGGGGGACCAACTCCATGCC 488

Qy         21 GlnLeuArgAspLeuThrSerSerSerSerAspGluLeuSerTrpIleIleGluLeuLeu 40
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        489 CAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATTGAGCTGCTG 548

Qy         41 GluLysAspGlyMetAlaPheGlnGluAlaLeuAspProGlyProPheAspGlnGlySer 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        549 GAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCCTTTGACCAGGGCAGC 608

Qy         61 ProPheAlaGlnGluLeuLeuAspAspGlyGlnGlnAlaSerProTyrHisProGlySer 80
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        609 CCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCACCCCGGCAGC 668

Qy         81 CysGlyAlaGly 84
              ||||||||||||
Db        669 TGTGGCGCAGGA 680

RESULT 10
US-09-880-107-3420
; Sequence 3420, Application US/09880107
; Patent No. US20020142981A1
; GENERAL INFORMATION:
;  APPLICANT: Horne, Darci T.
;  APPLICANT:  Vockley, Joseph G.
;  APPLICANT:  Scherf, Uwe
;  APPLICANT:  Gene Logic, Inc.
;  TITLE OF INVENTION: Gene Expression Profiles in Liver Cancer
;  FILE REFERENCE: 44921-5028-WO
;  CURRENT APPLICATION NUMBER: US/09/880,107
;  CURRENT FILING DATE:  2001-06-14
;  PRIOR APPLICATION NUMBER: US 60/211,379
;  PRIOR FILING DATE: 2000-06-14
;  PRIOR APPLICATION NUMBER: US 60/237,054
;  PRIOR FILING DATE: 2000-10-02
;  NUMBER OF SEQ ID NOS: 3950
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 3420
;   LENGTH: 1915
;   TYPE: DNA
;   ORGANISM: Homo sapiens
;   FEATURE:
;   OTHER INFORMATION: Genbank Accession No. US20020142981A1 U73843
US-09-880-107-3420

Alignment Scores:
Pred. No.:              4.86e-55       Length:          1915
Score:                  445.00         Matches:         84
Percent Similarity:     100.00%        Conservative:    0
Best Local Similarity:  100.00%        Mismatches:      0
Query Match:            100.00%        Indels:          0
DB:                     10             Gaps:            0

US-08-978-217-7 (1-84) x US-09-880-107-3420 (1-1915)

Qy          1 AsnCysAlaLeuGluGluLeuArgLeuValPheGlyProLeuGlyAspGlnLeuHisAla 20
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        429 AATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGCCTCTGGGGGACCAACTCCATGCC 488

Qy         21 GlnLeuArgAspLeuThrSerSerSerSerAspGluLeuSerTrpIleIleGluLeuLeu 40
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        489 CAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATTGAGCTGCTG 548

Qy         41 GluLysAspGlyMetAlaPheGlnGluAlaLeuAspProGlyProPheAspGlnGlySer 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        549 GAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCCTTTGACCAGGGCAGC 608

Qy         61 ProPheAlaGlnGluLeuLeuAspAspGlyGlnGlnAlaSerProTyrHisProGlySer 80
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        609 CCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCACCCCGGCAGC 668

Qy         81 CysGlyAlaGly 84
              ||||||||||||
Db        669 TGTGGCGCAGGA 680

RESULT 11
US-09-967-768A-192
; Sequence 192, Application US/09967768A
; Patent No. US20020150877A1
; GENERAL INFORMATION:
;  APPLICANT: Augustus, Meena
;  TITLE OF INVENTION: Cancer Gene Determination and Therapeutic Screening Using Signatu
;  TITLE OF INVENTION:  Sets
;  FILE REFERENCE: 689290-72
;  CURRENT APPLICATION NUMBER: US/09/967,768A
;  CURRENT FILING DATE:  2001-09-28
```

```
;  PRIOR APPLICATION NUMBER: US/60/236,109
;  PRIOR FILING DATE: 2000-09-28
;  PRIOR APPLICATION NUMBER: US/60/236,034
;  PRIOR FILING DATE: 2000-09-28
;  PRIOR APPLICATION NUMBER: US/60/236,111
;  PRIOR FILING DATE: 2000-09-28
;  NUMBER OF SEQ ID NOS: 325
;  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 192
;   LENGTH: 1915
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-967-768A-192

Alignment Scores:
Pred. No.:              4.86e-55        Length:         1915
Score:                  445.00          Matches:        84
Percent Similarity:     100.00%         Conservative:   0
Best Local Similarity:  100.00%         Mismatches:     0
Query Match:            100.00%         Indels:         0
DB:                     10              Gaps:           0

US-08-978-217-7 (1-84) x US-09-967-768A-192 (1-1915)

Qy          1 AsnCysAlaLeuGluGluLeuArgLeuValPheGlyProLeuGlyAspGlnLeuHisAla 20
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        429 AATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGCCTCTGGGGGACCAACTCCATGCC 488

Qy         21 GlnLeuArgAspLeuThrSerSerSerSerAspGluLeuSerTrpIleIleGluLeuLeu 40
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        489 CAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATTGAGCTGCTG 548

Qy         41 GluLysAspGlyMetAlaPheGlnGluAlaLeuAspProGlyProPheAspGlnGlySer 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        549 GAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCCTTTGACCAGGGCAGC 608

Qy         61 ProPheAlaGlnGluLeuLeuAspAspGlyGlnGlnAlaSerProTyrHisProGlySer 80
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        609 CCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCACCCCGGCAGC 668

Qy         81 CysGlyAlaGly 84
              ||||||||||||
Db        669 TGTGGCGCAGGA 680

RESULT 12
US-09-922-217-1105
; Sequence 1105, Application US/09922217
; Patent No. US20020076414A1
; GENERAL INFORMATION:
;  APPLICANT: Xu, Jiangchun
;  APPLICANT:  Lodes, Michael J.
;  APPLICANT:  Secrist, Heather
;  APPLICANT:  Benson, Darin R.
;  APPLICANT:  Meagher, Madeleine Joy
;  APPLICANT:  Stolk, John A.
;  APPLICANT:  Wang, Tongtong
;  APPLICANT:  Jiang, Yuqiu
;  APPLICANT:  Smith, Carole Lynn
;  APPLICANT:  King, Gordon E.
;  APPLICANT:  Wang, Aijun
;  APPLICANT:  Clapper, Jonathan D.
;  TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY AND DIAGNOSIS
;  TITLE OF INVENTION:  OF COLON CANCER AND METHODS FOR THEIR USE
;  FILE REFERENCE: 210121.471C13
;  CURRENT APPLICATION NUMBER: US/09/922,217
;  CURRENT FILING DATE:  2001-08-03
;  NUMBER OF SEQ ID NOS: 1124
;  SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 1105
;   LENGTH: 1917
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-922-217-1105

Alignment Scores:
Pred. No.:              4.86e-55        Length:         1917
Score:                  445.00          Matches:        84
Percent Similarity:     100.00%         Conservative:   0
Best Local Similarity:  100.00%         Mismatches:     0
Query Match:            100.00%         Indels:         0
DB:                     9               Gaps:           0

US-08-978-217-7 (1-84) x US-09-922-217-1105 (1-1917)

Qy          1 AsnCysAlaLeuGluGluLeuArgLeuValPheGlyProLeuGlyAspGlnLeuHisAla 20
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        431 AATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGCCTCTGGGGGACCAACTCCATGCC 490

Qy         21 GlnLeuArgAspLeuThrSerSerSerSerAspGluLeuSerTrpIleIleGluLeuLeu 40
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        491 CAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATTGAGCTGCTG 550

Qy         41 GluLysAspGlyMetAlaPheGlnGluAlaLeuAspProGlyProPheAspGlnGlySer 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        551 GAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCCTTTGACCAGGGCAGC 610

Qy         61 ProPheAlaGlnGluLeuLeuAspAspGlyGlnGlnAlaSerProTyrHisProGlySer 80
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        611 CCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCACCCCGGCAGC 670

Qy         81 CysGlyAlaGly 84
              ||||||||||||
Db        671 TGTGGCGCAGGA 682

RESULT 13
US-10-025-380-1105
; Sequence 1105, Application US/10025380
; Publication No. US20020182191A1
; GENERAL INFORMATION:
;  APPLICANT: Xu, Jiangchun
;  APPLICANT:  Lodes, Michael J.
;  APPLICANT:  Secrist, Heather
;  APPLICANT:  Benson, Darin R.
;  APPLICANT:  Meagher, Madeleine Joy
;  APPLICANT:  Stolk, John A.
;  APPLICANT:  Wang, Tongtong
;  APPLICANT:  Jiang, Yuqiu
;  APPLICANT:  Smith, Carole L.
;  APPLICANT:  King, Gordon E.
;  APPLICANT:  Wang, Aijun
;  APPLICANT:  Clapper, Jonathan D.
;  APPLICANT:  Skeiky, Yasir A. W.
;  APPLICANT:  Fanger, Gary R.
;  APPLICANT:  Vedvick Thomas S.
;  APPLICANT:  Carter, Darrick
;  TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY AND DIAGNOSIS
;  TITLE OF INVENTION:  OF COLON CANCER AND METHODS FOR THEIR USE
;  FILE REFERENCE: 210121.471C14
;  CURRENT APPLICATION NUMBER: US/10/025,380
;  CURRENT FILING DATE:  2001-12-19
;  NUMBER OF SEQ ID NOS: 1129
;  SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 1105
;   LENGTH: 1917
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-10-025-380-1105

Alignment Scores:
Pred. No.:              4.86e-55        Length:         1917
Score:                  445.00          Matches:        84
Percent Similarity:     100.00%         Conservative:   0
Best Local Similarity:  100.00%         Mismatches:     0
Query Match:            100.00%         Indels:         0
DB:                     14              Gaps:           0
```

```
US-08-978-217-7 (1-84) x US-10-025-380-1105 (1-1917)

Qy          1 AsnCysAlaLeuGluGluLeuArgLeuValPheGlyProLeuGlyAspGlnLeuHisAla 20
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        431 AATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGCCTCTGGGGGACCAACTCCATGCC 490

Qy         21 GlnLeuArgAspLeuThrSerSerSerSerAspGluLeuSerTrpIleIleGluLeuLeu 40
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        491 CAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATTGAGCTGCTG 550

Qy         41 GluLysAspGlyMetAlaPheGlnGluAlaLeuAspProGlyProPheAspGlnGlySer 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        551 GAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCCTTTGACCAGGGCAGC 610

Qy         61 ProPheAlaGlnGluLeuLeuAspAspGlyGlnGlnAlaSerProTyrHisProGlySer 80
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        611 CCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCACCCCGGCAGC 670

Qy         81 CysGlyAlaGly 84
              ||||||||||||
Db        671 TGTGGCGCAGGA 682

RESULT 14
US-10-264-049-756
; Sequence 756, Application US/10264049
; Publication No. US20040005579A1
; GENERAL INFORMATION:
;  APPLICANT: Birse et al.
;  TITLE OF INVENTION: Nucleic Acids, Proteins, and Antibodies
;  FILE REFERENCE: PA133P1
;  CURRENT APPLICATION NUMBER: US/10/264,049
;  CURRENT FILING DATE:  2002-10-04
;  PRIOR APPLICATION NUMBER: PCT/US01/18569
;  PRIOR FILING DATE: 2001-06-07
;  PRIOR APPLICATION NUMBER: US 60/209,467
;  PRIOR FILING DATE: 2000-06-07
;  NUMBER OF SEQ ID NOS: 4360
;  SOFTWARE: PatentIn Ver. 3.1
; SEQ ID NO 756
;   LENGTH: 1956
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-10-264-049-756

Alignment Scores:
Pred. No.:                4.99e-55        Length:          1956
Score:                    445.00          Matches:         84
Percent Similarity:       100.00%         Conservative:    0
Best Local Similarity:    100.00%         Mismatches:      0
Query Match:              100.00%         Indels:          0
DB:                       12              Gaps:            0

US-08-978-217-7 (1-84) x US-10-264-049-756 (1-1956)

Qy          1 AsnCysAlaLeuGluGluLeuArgLeuValPheGlyProLeuGlyAspGlnLeuHisAla 20
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        470 AATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGCCTCTGGGGGACCAACTCCATGCC 529

Qy         21 GlnLeuArgAspLeuThrSerSerSerSerAspGluLeuSerTrpIleIleGluLeuLeu 40
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        530 CAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATTGAGCTGCTG 589

Qy         41 GluLysAspGlyMetAlaPheGlnGluAlaLeuAspProGlyProPheAspGlnGlySer 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        590 GAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCCTTTGACCAGGGCAGC 649

Qy         61 ProPheAlaGlnGluLeuLeuAspAspGlyGlnGlnAlaSerProTyrHisProGlySer 80
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        650 CCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCACCCCGGCAGC 709

Qy         81 CysGlyAlaGly 84
              ||||||||||||
Db        710 TGTGGCGCAGGA 721

RESULT 15
US-09-925-301-207
; Sequence 207, Application US/09925301
; Patent No. US20020052308A1
; GENERAL INFORMATION:
;  APPLICANT: Rosen et al.
;  TITLE OF INVENTION: Nucleic Acids, Proteins and Antibodies
;  FILE REFERENCE: PA106
;  CURRENT APPLICATION NUMBER: US/09/925,301
;  CURRENT FILING DATE:  2001-08-10
;  PRIOR APPLICATION NUMBER: PCT/US00/05882
;  PRIOR FILING DATE: 2000-03-08
;  PRIOR APPLICATION NUMBER: 60/124,270
;  PRIOR FILING DATE: 1999-03-12
;  NUMBER OF SEQ ID NOS: 1694
;  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 207
;   LENGTH: 1996
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-925-301-207

Alignment Scores:
Pred. No.:                5.12e-55        Length:          1996
Score:                    445.00          Matches:         84
Percent Similarity:       100.00%         Conservative:    0
Best Local Similarity:    100.00%         Mismatches:      0
Query Match:              100.00%         Indels:          0
DB:                       9               Gaps:            0

US-08-978-217-7 (1-84) x US-09-925-301-207 (1-1996)

Qy          1 AsnCysAlaLeuGluGluLeuArgLeuValPheGlyProLeuGlyAspGlnLeuHisAla 20
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        450 AATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGCCTCTGGGGGACCAACTCCATGCC 509

Qy         21 GlnLeuArgAspLeuThrSerSerSerSerAspGluLeuSerTrpIleIleGluLeuLeu 40
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        510 CAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATTGAGCTGCTG 569

Qy         41 GluLysAspGlyMetAlaPheGlnGluAlaLeuAspProGlyProPheAspGlnGlySer 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        570 GAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCCTTTGACCAGGGCAGC 629

Qy         61 ProPheAlaGlnGluLeuLeuAspAspGlyGlnGlnAlaSerProTyrHisProGlySer 80
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        630 CCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCACCCCGGCAGC 689

Qy         81 CysGlyAlaGly 84
              ||||||||||||
Db        690 TGTGGCGCAGGA 701


Search completed: February 13, 2004, 01:46:05
Job time : 139.542 secs
```

GenCore version 5.1.6

OM nucleic - nucleic search, using sw model

Run on: February 13, 2004, 01:27:22 ; Search time 88.8409 Seconds
(without alignments)
10448.744 Million cell updates/sec

Title: US-08-978-217-6
Perfect score: 252
Sequence: 1 AATTGTGCCCTTGAGGAGCT.....CCGGCAGCTGTGGCGCAGGA 252

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 2449703 seqs, 1841816367 residues

Total number of hits satisfying chosen parameters: 4899406

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Published_Applications_NA:*
1: /cgn2_6/ptodata/1/pubpna/US07_PUBCOMB.seq:*
2: /cgn2_6/ptodata/1/pubpna/PCT_NEW_PUB.seq:*
3: /cgn2_6/ptodata/1/pubpna/US06_NEW_PUB.seq:*
4: /cgn2_6/ptodata/1/pubpna/US06_PUBCOMB.seq:*
5: /cgn2_6/ptodata/1/pubpna/US07_NEW_PUB.seq:*
6: /cgn2_6/ptodata/1/pubpna/PCTUS_PUBCOMB.seq:*
7: /cgn2_6/ptodata/1/pubpna/US08_NEW_PUB.seq:*
8: /cgn2_6/ptodata/1/pubpna/US08_PUBCOMB.seq:*
9: /cgn2_6/ptodata/1/pubpna/US09A_PUBCOMB.seq:*
10: /cgn2_6/ptodata/1/pubpna/US09B_PUBCOMB.seq:*
11: /cgn2_6/ptodata/1/pubpna/US09C_PUBCOMB.seq:*
12: /cgn2_6/ptodata/1/pubpna/US09_NEW_PUB.seq:*
13: /cgn2_6/ptodata/1/pubpna/US09_NEW_PUB.seq2:*
14: /cgn2_6/ptodata/1/pubpna/US10A_PUBCOMB.seq:*
15: /cgn2_6/ptodata/1/pubpna/US10B_PUBCOMB.seq:*
16: /cgn2_6/ptodata/1/pubpna/US10_NEW_PUB.seq:*
17: /cgn2_6/ptodata/1/pubpna/US60_NEW_PUB.seq:*
18: /cgn2_6/ptodata/1/pubpna/US60_PUBCOMB.seq:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
c 1	252	100.0	563	9	US-09-922-217-944	Sequence 944, App
c 2	252	100.0	563	10	US-09-833-263-944	Sequence 944, App
c 3	252	100.0	563	14	US-10-025-380-944	Sequence 944, App
c 4	252	100.0	626	9	US-09-922-217-853	Sequence 853, App
c 5	252	100.0	626	10	US-09-833-263-853	Sequence 853, App
c 6	252	100.0	626	14	US-10-025-380-853	Sequence 853, App
7	252	100.0	1907	15	US-10-097-340-74	Sequence 74, Appl
8	252	100.0	1915	10	US-09-964-824A-101	Sequence 101, App
9	252	100.0	1915	10	US-09-964-824A-563	Sequence 563, App
10	252	100.0	1915	10	US-09-880-107-3420	Sequence 3420, Ap
11	252	100.0	1915	10	US-09-967-768A-192	Sequence 192, App
12	252	100.0	1917	9	US-09-922-217-1105	Sequence 1105, Ap
13	252	100.0	1917	14	US-10-025-380-1105	Sequence 1105, Ap
14	252	100.0	1956	12	US-10-264-049-756	Sequence 756, App
15	252	100.0	1996	9	US-09-925-301-207	Sequence 207, App
16	252	100.0	2269	12	US-10-131-410-64	Sequence 64, Appl
17	249	98.8	355	10	US-09-867-701-4818	Sequence 4818, Ap
c 18	174	69.0	174	10	US-09-998-598-1740	Sequence 1740, Ap
c 19	63	25.0	437	10	US-09-998-598-2216	Sequence 2216, Ap
20	40.4	16.0	14889	13	US-10-101-510-356	Sequence 356, App
21	40.4	16.0	14896	12	US-10-159-563-206	Sequence 206, App
22	38.8	15.4	532	13	US-10-027-632-280565	Sequence 280565,
23	38.8	15.4	532	14	US-10-027-632-280565	Sequence 280565,
24	38.8	15.4	534	13	US-10-029-386-11328	Sequence 11328, A
25	38.8	15.4	1011	13	US-10-029-386-25041	Sequence 25041, A
c 26	38.8	15.4	5173	10	US-09-880-107-3356	Sequence 3356, Ap
c 27	38.8	15.4	5173	15	US-10-171-581-159	Sequence 159, App
28	38.4	15.2	532	13	US-10-027-632-280564	Sequence 280564,
29	38.4	15.2	532	14	US-10-027-632-280564	Sequence 280564,
30	37.2	14.8	1413	12	US-10-369-493-37726	Sequence 37726, A
c 31	36.4	14.4	560	13	US-10-027-632-159559	Sequence 159559,
c 32	36.4	14.4	560	14	US-10-027-632-159559	Sequence 159559,
33	36.2	14.4	1539	13	US-10-259-165-233	Sequence 233, App
34	35.8	14.2	275	9	US-09-923-876-4804	Sequence 4804, Ap
35	35.8	14.2	275	12	US-09-923-876-4804	Sequence 4804, Ap
c 36	35.2	14.0	13500	9	US-09-962-436-269	Sequence 269, App
c 37	35.2	14.0	13500	10	US-09-954-456-55	Sequence 55, Appl
c 38	35.2	14.0	13500	10	US-09-954-456-1132	Sequence 1132, Ap
c 39	35.2	14.0	13500	10	US-09-954-456-1801	Sequence 1801, Ap
c 40	35.2	14.0	13500	10	US-09-880-107-2265	Sequence 2265, Ap
c 41	35.2	14.0	13500	10	US-09-954-531-145	Sequence 145, App
c 42	35.2	14.0	13500	10	US-09-954-531-363	Sequence 363, App
43	35	13.9	2161	9	US-09-810-808-4	Sequence 4, Appli
c 44	35	13.9	19616	10	US-09-764-877-3220	Sequence 3220, Ap
c 45	35	13.9	19616	12	US-10-242-515-3220	Sequence 3220, Ap

ALIGNMENTS

RESULT 1
US-09-922-217-944/c
; Sequence 944, Application US/09922217
; Patent No. US20020076414A1
; GENERAL INFORMATION:
; APPLICANT: Xu, Jiangchun
; APPLICANT: Lodes, Michael J.
; APPLICANT: Secrist, Heather
; APPLICANT: Benson, Darin R.
; APPLICANT: Meagher, Madeleine Joy
; APPLICANT: Stolk, John A.
; APPLICANT: Wang, Tongtong
; APPLICANT: Jiang, Yuqiu
; APPLICANT: Smith, Carole Lynn
; APPLICANT: King, Gordon E.
; APPLICANT: Wang, Aijun
; APPLICANT: Clapper, Jonathan D.
; TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY AND DIAGNOSIS
; TITLE OF INVENTION: OF COLON CANCER AND METHODS FOR THEIR USE
; FILE REFERENCE: 210121.471C13
; CURRENT APPLICATION NUMBER: US/09/922,217
; CURRENT FILING DATE: 2001-08-03
; NUMBER OF SEQ ID NOS: 1124
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 944
; LENGTH: 563
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-922-217-944

Query Match 100.0%; Score 252; DB 9; Length 563;
Best Local Similarity 100.0%; Pred. No. 2.1e-64;
Matches 252; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy          1 AATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGCCTCTGGGGGACCAACTCCATGCC 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        472 AATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGCCTCTGGGGGACCAACTCCATGCC 413
```

```
Qy          61 CAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATTGAGCTGCTG 120
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         412 CAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATTGAGCTGCTG 353

Qy         121 GAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCCTTTGACCAGGGCAGC 180
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         352 GAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCCTTTGACCAGGGCAGC 293

Qy         181 CCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCACCCCGGCAGC 240
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         292 CCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCACCCCGGCAGC 233

Qy         241 TGTGGCGCAGGA 252
               ||||||||||||
Db         232 TGTGGCGCAGGA 221


RESULT 2
US-09-833-263-944/c
; Sequence 944, Application US/09833263
; Patent No. US20020110547A1
; GENERAL INFORMATION:
;  APPLICANT: Wang, Aijun
;  APPLICANT:  Clapper, Jonathan D.
;  APPLICANT:  Stolk, John A.
;  APPLICANT:  Meagher, Madeleine J.
;  TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY AND
;  TITLE OF INVENTION:  DIAGNOSIS OF COLON CANCER AND METHODS FOR THEIR USE
;  FILE REFERENCE: 210121.471C12
;  CURRENT APPLICATION NUMBER: US/09/833,263
;  CURRENT FILING DATE:  2001-04-10
;  NUMBER OF SEQ ID NOS: 1093
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 944
;   LENGTH: 563
;   TYPE: DNA
;   ORGANISM: Homo sapien
US-09-833-263-944

  Query Match             100.0%;  Score 252;  DB 10;  Length 563;
  Best Local Similarity   100.0%;  Pred. No. 2.1e-64;
  Matches  252;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy           1 AATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGCCTCTGGGGGACCAACTCCATGCC 60
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         472 AATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGCCTCTGGGGGACCAACTCCATGCC 413

Qy          61 CAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATTGAGCTGCTG 120
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         412 CAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATTGAGCTGCTG 353

Qy         121 GAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCCTTTGACCAGGGCAGC 180
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         352 GAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCCTTTGACCAGGGCAGC 293

Qy         181 CCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCACCCCGGCAGC 240
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         292 CCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCACCCCGGCAGC 233

Qy         241 TGTGGCGCAGGA 252
               ||||||||||||
Db         232 TGTGGCGCAGGA 221


RESULT 3
US-10-025-380-944/c
; Sequence 944, Application US/10025380
; Publication No. US20020182191A1
; GENERAL INFORMATION:
;  APPLICANT: Xu, Jiangchun
;  APPLICANT:  Lodes, Michael J.
;  APPLICANT:  Secrist, Heather
;  APPLICANT:  Benson, Darin R.
;  APPLICANT:  Meagher, Madeleine Joy
;  APPLICANT:  Stolk, John A.
;  APPLICANT:  Wang, Tongtong
;  APPLICANT:  Jiang, Yuqiu
;  APPLICANT:  Smith, Carole L.
;  APPLICANT:  King, Gordon E.
;  APPLICANT:  Wang, Aijun
;  APPLICANT:  Clapper, Jonathan D.
;  APPLICANT:  Skeiky, Yasir A. W.
;  APPLICANT:  Fanger, Gary R.
;  APPLICANT:  Vedvick Thomas S.
;  APPLICANT:  Carter, Darrick
;  TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY AND DIAGNOSIS
;  TITLE OF INVENTION:  OF COLON CANCER AND METHODS FOR THEIR USE
;  FILE REFERENCE: 210121.471C14
;  CURRENT APPLICATION NUMBER: US/10/025,380
;  CURRENT FILING DATE:  2001-12-19
;  NUMBER OF SEQ ID NOS: 1129
;  SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 944
;   LENGTH: 563
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-10-025-380-944

  Query Match             100.0%;  Score 252;  DB 14;  Length 563;
  Best Local Similarity   100.0%;  Pred. No. 2.1e-64;
  Matches  252;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy           1 AATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGCCTCTGGGGGACCAACTCCATGCC 60
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         472 AATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGCCTCTGGGGGACCAACTCCATGCC 413

Qy          61 CAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATTGAGCTGCTG 120
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         412 CAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATTGAGCTGCTG 353

Qy         121 GAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCCTTTGACCAGGGCAGC 180
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         352 GAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCCTTTGACCAGGGCAGC 293

Qy         181 CCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCACCCCGGCAGC 240
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         292 CCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCACCCCGGCAGC 233

Qy         241 TGTGGCGCAGGA 252
               ||||||||||||
Db         232 TGTGGCGCAGGA 221


RESULT 4
US-09-922-217-853/c
; Sequence 853, Application US/09922217
; Patent No. US20020076414A1
; GENERAL INFORMATION:
;  APPLICANT: Xu, Jiangchun
;  APPLICANT:  Lodes, Michael J.
;  APPLICANT:  Secrist, Heather
;  APPLICANT:  Benson, Darin R.
;  APPLICANT:  Meagher, Madeleine Joy
;  APPLICANT:  Stolk, John A.
;  APPLICANT:  Wang, Tongtong
;  APPLICANT:  Jiang, Yuqiu
;  APPLICANT:  Smith, Carole Lynn
;  APPLICANT:  King, Gordon E.
;  APPLICANT:  Wang, Aijun
;  APPLICANT:  Clapper, Jonathan D.
;  TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY AND DIAGNOSIS
;  TITLE OF INVENTION:  OF COLON CANCER AND METHODS FOR THEIR USE
;  FILE REFERENCE: 210121.471C13
;  CURRENT APPLICATION NUMBER: US/09/922,217
;  CURRENT FILING DATE:  2001-08-03
;  NUMBER OF SEQ ID NOS: 1124
```

```
;  SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 853
;   LENGTH: 626
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-922-217-853

  Query Match             100.0%;  Score 252;  DB 9;  Length 626;
  Best Local Similarity   100.0%;  Pred. No. 2.2e-64;
  Matches  252;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 AATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGCCTCTGGGGGACCAACTCCATGCC 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        471 AATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGCCTCTGGGGGACCAACTCCATGCC 412

Qy         61 CAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATTGAGCTGCTG 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        411 CAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATTGAGCTGCTG 352

Qy        121 GAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCCTTTGACCAGGGCAGC 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        351 GAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCCTTTGACCAGGGCAGC 292

Qy        181 CCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCACCCCGGCAGC 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        291 CCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCACCCCGGCAGC 232

Qy        241 TGTGGCGCAGGA 252
              ||||||||||||
Db        231 TGTGGCGCAGGA 220


RESULT 5
US-09-833-263-853/c
; Sequence 853, Application US/09833263
; Patent No. US20020110547A1
; GENERAL INFORMATION:
;  APPLICANT: Wang, Aijun
;  APPLICANT:  Clapper, Jonathan D.
;  APPLICANT:  Stolk, John A.
;  APPLICANT:  Meagher, Madeleine J.
;  TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY AND
;  TITLE OF INVENTION:  DIAGNOSIS OF COLON CANCER AND METHODS FOR THEIR USE
;  FILE REFERENCE: 210121.471C12
;  CURRENT APPLICATION NUMBER: US/09/833,263
;  CURRENT FILING DATE:  2001-04-10
;  NUMBER OF SEQ ID NOS: 1093
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 853
;   LENGTH: 626
;   TYPE: DNA
;   ORGANISM: Homo sapien
US-09-833-263-853

  Query Match             100.0%;  Score 252;  DB 10;  Length 626;
  Best Local Similarity   100.0%;  Pred. No. 2.2e-64;
  Matches  252;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 AATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGCCTCTGGGGGACCAACTCCATGCC 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        471 AATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGCCTCTGGGGGACCAACTCCATGCC 412

Qy         61 CAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATTGAGCTGCTG 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        411 CAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATTGAGCTGCTG 352

Qy        121 GAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCCTTTGACCAGGGCAGC 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        351 GAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCCTTTGACCAGGGCAGC 292

Qy        181 CCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCACCCCGGCAGC 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        291 CCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCACCCCGGCAGC 232

Qy        241 TGTGGCGCAGGA 252
              ||||||||||||
Db        231 TGTGGCGCAGGA 220


RESULT 6
US-10-025-380-853/c
; Sequence 853, Application US/10025380
; Publication No. US20020182191A1
; GENERAL INFORMATION:
;  APPLICANT: Xu, Jiangchun
;  APPLICANT:  Lodes, Michael J.
;  APPLICANT:  Secrist, Heather
;  APPLICANT:  Benson, Darin R.
;  APPLICANT:  Meagher, Madeleine Joy
;  APPLICANT:  Stolk, John A.
;  APPLICANT:  Wang, Tongtong
;  APPLICANT:  Jiang, Yuqiu
;  APPLICANT:  Smith, Carole L.
;  APPLICANT:  King, Gordon E.
;  APPLICANT:  Wang, Aijun
;  APPLICANT:  Clapper, Jonathan D.
;  APPLICANT:  Skeiky, Yasir A. W.
;  APPLICANT:  Fanger, Gary R.
;  APPLICANT:  Vedvick Thomas S.
;  APPLICANT:  Carter, Darrick
;  TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY AND DIAGNOSIS
;  TITLE OF INVENTION:  OF COLON CANCER AND METHODS FOR THEIR USE
;  FILE REFERENCE: 210121.471C14
;  CURRENT APPLICATION NUMBER: US/10/025,380
;  CURRENT FILING DATE:  2001-12-19
;  NUMBER OF SEQ ID NOS: 1129
;  SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 853
;   LENGTH: 626
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-10-025-380-853

  Query Match             100.0%;  Score 252;  DB 14;  Length 626;
  Best Local Similarity   100.0%;  Pred. No. 2.2e-64;
  Matches  252;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 AATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGCCTCTGGGGGACCAACTCCATGCC 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        471 AATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGCCTCTGGGGGACCAACTCCATGCC 412

Qy         61 CAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATTGAGCTGCTG 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        411 CAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATTGAGCTGCTG 352

Qy        121 GAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCCTTTGACCAGGGCAGC 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        351 GAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCCTTTGACCAGGGCAGC 292

Qy        181 CCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCACCCCGGCAGC 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        291 CCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCACCCCGGCAGC 232

Qy        241 TGTGGCGCAGGA 252
              ||||||||||||
Db        231 TGTGGCGCAGGA 220


RESULT 7
US-10-097-340-74
; Sequence 74, Application US/10097340
; Publication No. US20030087250A1
; GENERAL INFORMATION:
;  APPLICANT: John MONAHAN
;  APPLICANT:  Manjula GANNAVARAPU
;  APPLICANT:  Sebastian HOERSCH
```

```
;  APPLICANT:  Shubhangi KAMATKAR
;  APPLICANT:  Steve G. KOVATS
;  APPLICANT:  Rachel E. MEYERS
;  APPLICANT:  Michael MORRISEY
;  APPLICANT:  Peter OLANDT
;  APPLICANT:  Ami SEN
;  APPLICANT:  Peter VEIBY
;  APPLICANT:  Gordon B. MILLS
;  APPLICANT:  Robert C. BAST, Jr.
;  APPLICANT:  Karen LU
;  APPLICANT:  Rosemarie SCHMANDT
;  APPLICANT:  Xumei ZHAO
;  APPLICANT:  Karen GLATT
;  TITLE OF INVENTION: Nucleic Acid Molecules and Proteins For The Identification,
;  TITLE OF INVENTION:  Assessment, Prevention, and Therapy of Ovarian Cancer
;  FILE REFERENCE: MRI-030
;  CURRENT APPLICATION NUMBER: US/10/097,340
;  CURRENT FILING DATE:  2002-03-14
;  PRIOR APPLICATION NUMBER: 60/276,025
;  PRIOR FILING DATE: 2001-03-14
;  PRIOR APPLICATION NUMBER: 60/325,149
;  PRIOR FILING DATE: 2001-09-26
;  PRIOR APPLICATION NUMBER: 60/276,026
;  PRIOR FILING DATE: 2001-03-14
;  PRIOR APPLICATION NUMBER: 60/324,967
;  PRIOR FILING DATE: 2001/09/26
;  PRIOR APPLICATION NUMBER: 60/311,732
;  PRIOR FILING DATE: 2001-08-10
;  PRIOR APPLICATION NUMBER: 60/325,102
;  PRIOR FILING DATE: 2001-09-26
;  PRIOR APPLICATION NUMBER: 60/323,580
;  PRIOR FILING DATE: 2001-09-19
;  NUMBER OF SEQ ID NOS: 363
;  SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 74
;   LENGTH: 1907
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-10-097-340-74

  Query Match           100.0%;  Score 252;  DB 15;  Length 1907;
  Best Local Similarity  100.0%;  Pred. No. 2.4e-64;
  Matches  252;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 AATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGCCTCTGGGGGACCAACTCCATGCC 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        405 AATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGCCTCTGGGGGACCAACTCCATGCC 464

Qy         61 CAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATTGAGCTGCTG 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        465 CAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATTGAGCTGCTG 524

Qy        121 GAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCCTTTGACCAGGGCAGC 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        525 GAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCCTTTGACCAGGGCAGC 584

Qy        181 CCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCACCCCGGCAGC 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        585 CCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCACCCCGGCAGC 644

Qy        241 TGTGGCGCAGGA 252
              ||||||||||||
Db        645 TGTGGCGCAGGA 656


RESULT 8
US-09-964-824A-101
; Sequence 101, Application US/09964824A
; Patent No. US20020102531A1
; GENERAL INFORMATION:
;  APPLICANT: Horrigan, Stephen
;  TITLE OF INVENTION: Cancer Gene Determination and Therapeutic Screening Using Signatu
;  TITLE OF INVENTION:  Sets
;  FILE REFERENCE: 689290-73
;  CURRENT APPLICATION NUMBER: US/09/964,824A
;  CURRENT FILING DATE:  2001-09-27
;  PRIOR APPLICATION NUMBER: US/60/236,033
;  PRIOR FILING DATE: 2000-09-28
;  PRIOR APPLICATION NUMBER: US/60/236,032
;  PRIOR FILING DATE: 2000-09-28
;  PRIOR APPLICATION NUMBER: US/60/236,028
;  PRIOR FILING DATE: 2000-09-28
;  NUMBER OF SEQ ID NOS: 583
;  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 101
;   LENGTH: 1915
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-964-824A-101

  Query Match           100.0%;  Score 252;  DB 10;  Length 1915;
  Best Local Similarity  100.0%;  Pred. No. 2.4e-64;
  Matches  252;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 AATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGCCTCTGGGGGACCAACTCCATGCC 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        429 AATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGCCTCTGGGGGACCAACTCCATGCC 488

Qy         61 CAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATTGAGCTGCTG 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        489 CAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATTGAGCTGCTG 548

Qy        121 GAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCCTTTGACCAGGGCAGC 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        549 GAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCCTTTGACCAGGGCAGC 608

Qy        181 CCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCACCCCGGCAGC 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        609 CCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCACCCCGGCAGC 668

Qy        241 TGTGGCGCAGGA 252
              ||||||||||||
Db        669 TGTGGCGCAGGA 680


RESULT 9
US-09-964-824A-563
; Sequence 563, Application US/09964824A
; Patent No. US20020102531A1
; GENERAL INFORMATION:
;  APPLICANT: Horrigan, Stephen
;  TITLE OF INVENTION: Cancer Gene Determination and Therapeutic Screening Using Signati
;  TITLE OF INVENTION:  Sets
;  FILE REFERENCE: 689290-73
;  CURRENT APPLICATION NUMBER: US/09/964,824A
;  CURRENT FILING DATE:  2001-09-27
;  PRIOR APPLICATION NUMBER: US/60/236,033
;  PRIOR FILING DATE: 2000-09-28
;  PRIOR APPLICATION NUMBER: US/60/236,032
;  PRIOR FILING DATE: 2000-09-28
;  PRIOR APPLICATION NUMBER: US/60/236,028
;  PRIOR FILING DATE: 2000-09-28
;  NUMBER OF SEQ ID NOS: 583
;  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 563
;   LENGTH: 1915
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-964-824A-563

  Query Match           100.0%;  Score 252;  DB 10;  Length 1915;
  Best Local Similarity  100.0%;  Pred. No. 2.4e-64;
  Matches  252;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 AATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGCCTCTGGGGGACCAACTCCATGCC 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
```

```
Db        429 AATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGCCTCTGGGGGACCAACTCCATGCC 488

Qy         61 CAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATTGAGCTGCTG 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        489 CAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATTGAGCTGCTG 548

Qy        121 GAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCCTTTGACCAGGGCAGC 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        549 GAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCCTTTGACCAGGGCAGC 608

Qy        181 CCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCACCCCGGCAGC 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        609 CCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCACCCCGGCAGC 668

Qy        241 TGTGGCGCAGGA 252
              ||||||||||||
Db        669 TGTGGCGCAGGA 680


RESULT 10
US-09-880-107-3420
; Sequence 3420, Application US/09880107
; Patent No. US20020142981A1
; GENERAL INFORMATION:
;  APPLICANT: Horne, Darci T.
;  APPLICANT:  Vockley, Joseph G.
;  APPLICANT:  Scherf, Uwe
;  APPLICANT:  Gene Logic, Inc.
;  TITLE OF INVENTION: Gene Expression Profiles in Liver Cancer
;  FILE REFERENCE: 44921-5028-WO
;  CURRENT APPLICATION NUMBER: US/09/880,107
;  CURRENT FILING DATE:  2001-06-14
;  PRIOR APPLICATION NUMBER: US 60/211,379
;  PRIOR FILING DATE: 2000-06-14
;  PRIOR APPLICATION NUMBER: US 60/237,054
;  PRIOR FILING DATE: 2000-10-02
;  NUMBER OF SEQ ID NOS: 3950
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 3420
;   LENGTH: 1915
;   TYPE: DNA
;   ORGANISM: Homo sapiens
;   FEATURE:
;   OTHER INFORMATION: Genbank Accession No. US20020142981A1 U73843
US-09-880-107-3420

  Query Match            100.0%;  Score 252;  DB 10;  Length 1915;
  Best Local Similarity   100.0%;  Pred. No. 2.4e-64;
  Matches  252;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 AATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGCCTCTGGGGGACCAACTCCATGCC 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        429 AATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGCCTCTGGGGGACCAACTCCATGCC 488

Qy         61 CAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATTGAGCTGCTG 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        489 CAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATTGAGCTGCTG 548

Qy        121 GAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCCTTTGACCAGGGCAGC 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        549 GAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCCTTTGACCAGGGCAGC 608

Qy        181 CCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCACCCCGGCAGC 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        609 CCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCACCCCGGCAGC 668

Qy        241 TGTGGCGCAGGA 252
              ||||||||||||
Db        669 TGTGGCGCAGGA 680


RESULT 11
US-09-967-768A-192
; Sequence 192, Application US/09967768A
; Patent No. US20020150877A1
; GENERAL INFORMATION:
;  APPLICANT: Augustus, Meena
;  TITLE OF INVENTION: Cancer Gene Determination and Therapeutic Screening Using Signat
;  TITLE OF INVENTION:  Sets
;  FILE REFERENCE: 689290-72
;  CURRENT APPLICATION NUMBER: US/09/967,768A
;  CURRENT FILING DATE:  2001-09-28
;  PRIOR APPLICATION NUMBER: US/60/236,109
;  PRIOR FILING DATE: 2000-09-28
;  PRIOR APPLICATION NUMBER: US/60/236,034
;  PRIOR FILING DATE: 2000-09-28
;  PRIOR APPLICATION NUMBER: US/60/236,111
;  PRIOR FILING DATE: 2000-09-28
;  NUMBER OF SEQ ID NOS: 325
;  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 192
;   LENGTH: 1915
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-967-768A-192

  Query Match            100.0%;  Score 252;  DB 10;  Length 1915;
  Best Local Similarity   100.0%;  Pred. No. 2.4e-64;
  Matches  252;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 AATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGCCTCTGGGGGACCAACTCCATGCC 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        429 AATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGCCTCTGGGGGACCAACTCCATGCC 488

Qy         61 CAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATTGAGCTGCTG 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        489 CAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATTGAGCTGCTG 548

Qy        121 GAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCCTTTGACCAGGGCAGC 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        549 GAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCCTTTGACCAGGGCAGC 608

Qy        181 CCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCACCCCGGCAGC 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        609 CCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCACCCCGGCAGC 668

Qy        241 TGTGGCGCAGGA 252
              ||||||||||||
Db        669 TGTGGCGCAGGA 680


RESULT 12
US-09-922-217-1105
; Sequence 1105, Application US/09922217
; Patent No. US20020076414A1
; GENERAL INFORMATION:
;  APPLICANT: Xu, Jiangchun
;  APPLICANT:  Lodes, Michael J.
;  APPLICANT:  Secrist, Heather
;  APPLICANT:  Benson, Darin R.
;  APPLICANT:  Meagher, Madeleine Joy
;  APPLICANT:  Stolk, John A.
;  APPLICANT:  Wang, Tongtong
;  APPLICANT:  Jiang, Yuqiu
;  APPLICANT:  Smith, Carole Lynn
;  APPLICANT:  King, Gordon E.
;  APPLICANT:  Wang, Aijun
;  APPLICANT:  Clapper, Jonathan D.
;  TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY AND DIAGNOSIS
;  TITLE OF INVENTION:  OF COLON CANCER AND METHODS FOR THEIR USE
;  FILE REFERENCE: 210121.471C13
;  CURRENT APPLICATION NUMBER: US/09/922,217
;  CURRENT FILING DATE:  2001-08-03
;  NUMBER OF SEQ ID NOS: 1124
;  SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 1105
```

```
;   LENGTH: 1917
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-922-217-1105

  Query Match           100.0%;  Score 252;  DB 9;  Length 1917;
  Best Local Similarity  100.0%;  Pred. No. 2.4e-64;
  Matches  252;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 AATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGCCTCTGGGGGACCAACTCCATGCC 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        431 AATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGCCTCTGGGGGACCAACTCCATGCC 490

Qy         61 CAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATTGAGCTGCTG 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        491 CAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATTGAGCTGCTG 550

Qy        121 GAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCCTTTGACCAGGGCAGC 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        551 GAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCCTTTGACCAGGGCAGC 610

Qy        181 CCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCACCCCGGCAGC 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        611 CCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCACCCCGGCAGC 670

Qy        241 TGTGGCGCAGGA 252
              ||||||||||||
Db        671 TGTGGCGCAGGA 682


RESULT 13
US-10-025-380-1105
; Sequence 1105, Application US/10025380
; Publication No. US20020182191A1
; GENERAL INFORMATION:
;  APPLICANT: Xu, Jiangchun
;  APPLICANT:  Lodes, Michael J.
;  APPLICANT:  Secrist, Heather
;  APPLICANT:  Benson, Darin R.
;  APPLICANT:  Meagher, Madeleine Joy
;  APPLICANT:  Stolk, John A.
;  APPLICANT:  Wang, Tongtong
;  APPLICANT:  Jiang, Yuqiu
;  APPLICANT:  Smith, Carole L.
;  APPLICANT:  King, Gordon E.
;  APPLICANT:  Wang, Aijun
;  APPLICANT:  Clapper, Jonathan D.
;  APPLICANT:  Skeiky, Yasir A. W.
;  APPLICANT:  Fanger, Gary R.
;  APPLICANT:  Vedvick Thomas S.
;  APPLICANT:  Carter, Darrick
;  TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY AND DIAGNOSIS
;  TITLE OF INVENTION:  OF COLON CANCER AND METHODS FOR THEIR USE
;  FILE REFERENCE: 210121.471C14
;  CURRENT APPLICATION NUMBER: US/10/025,380
;  CURRENT FILING DATE:  2001-12-19
;  NUMBER OF SEQ ID NOS: 1129
;  SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 1105
;   LENGTH: 1917
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-10-025-380-1105

  Query Match           100.0%;  Score 252;  DB 14;  Length 1917;
  Best Local Similarity  100.0%;  Pred. No. 2.4e-64;
  Matches  252;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 AATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGCCTCTGGGGGACCAACTCCATGCC 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        431 AATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGCCTCTGGGGGACCAACTCCATGCC 490

Qy         61 CAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATTGAGCTGCTG 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        491 CAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATTGAGCTGCTG 550

Qy        121 GAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCCTTTGACCAGGGCAGC 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        551 GAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCCTTTGACCAGGGCAGC 610

Qy        181 CCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCACCCCGGCAGC 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        611 CCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCACCCCGGCAGC 670

Qy        241 TGTGGCGCAGGA 252
              ||||||||||||
Db        671 TGTGGCGCAGGA 682


RESULT 14
US-10-264-049-756
; Sequence 756, Application US/10264049
; Publication No. US20040005579A1
; GENERAL INFORMATION:
;  APPLICANT: Birse et al.
;  TITLE OF INVENTION: Nucleic Acids, Proteins, and Antibodies
;  FILE REFERENCE: PA133P1
;  CURRENT APPLICATION NUMBER: US/10/264,049
;  CURRENT FILING DATE:  2002-10-04
;  PRIOR APPLICATION NUMBER: PCT/US01/18569
;  PRIOR FILING DATE: 2001-06-07
;  PRIOR APPLICATION NUMBER: US 60/209,467
;  PRIOR FILING DATE: 2000-06-07
;  NUMBER OF SEQ ID NOS: 4360
;  SOFTWARE: PatentIn Ver. 3.1
; SEQ ID NO 756
;   LENGTH: 1956
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-10-264-049-756

  Query Match           100.0%;  Score 252;  DB 12;  Length 1956;
  Best Local Similarity  100.0%;  Pred. No. 2.4e-64;
  Matches  252;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 AATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGCCTCTGGGGGACCAACTCCATGCC 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        470 AATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGCCTCTGGGGGACCAACTCCATGCC 529

Qy         61 CAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATTGAGCTGCTG 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        530 CAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATTGAGCTGCTG 589

Qy        121 GAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCCTTTGACCAGGGCAGC 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        590 GAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCCTTTGACCAGGGCAGC 649

Qy        181 CCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCACCCCGGCAGC 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        650 CCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCACCCCGGCAGC 709

Qy        241 TGTGGCGCAGGA 252
              ||||||||||||
Db        710 TGTGGCGCAGGA 721


RESULT 15
US-09-925-301-207
; Sequence 207, Application US/09925301
; Patent No. US20020052308A1
; GENERAL INFORMATION:
;  APPLICANT: Rosen et al.
;  TITLE OF INVENTION: Nucleic Acids, Proteins and Antibodies
;  FILE REFERENCE: PA106
;  CURRENT APPLICATION NUMBER: US/09/925,301
;  CURRENT FILING DATE:  2001-08-10
```

```
;  PRIOR APPLICATION NUMBER: PCT/US00/05882
;  PRIOR FILING DATE: 2000-03-08
;  PRIOR APPLICATION NUMBER: 60/124,270
;  PRIOR FILING DATE: 1999-03-12
;  NUMBER OF SEQ ID NOS: 1694
;  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 207
;   LENGTH: 1996
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-925-301-207

  Query Match             100.0%;  Score 252;  DB 9;  Length 1996;
  Best Local Similarity   100.0%;  Pred. No. 2.4e-64;
  Matches  252;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 AATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGCCTCTGGGGGACCAACTCCATGCC 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        450 AATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGCCTCTGGGGGACCAACTCCATGCC 509

Qy         61 CAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATTGAGCTGCTG 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        510 CAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATTGAGCTGCTG 569

Qy        121 GAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCCTTTGACCAGGGCAGC 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        570 GAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCCTTTGACCAGGGCAGC 629

Qy        181 CCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCACCCCGGCAGC 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        630 CCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCACCCCGGCAGC 689

Qy        241 TGTGGCGCAGGA 252
              ||||||||||||
Db        690 TGTGGCGCAGGA 701


Search completed: February 13, 2004, 11:48:19
Job time : 89.8409 secs
```

GenCore version 5.1.6

OM protein - nucleic search, using frame_plus_p2n model

Run on: February 12, 2004, 21:34:51 ; Search time 585.395 Seconds
(without alignments)
2334.540 Million cell updates/sec

Title: US-08-978-217-2
Perfect score: 1980
Sequence: 1 MAATCEISNIFSNYFSAMYS.....YKFGKNSSGWKEEEVLQSRN 371

Scoring table: BLOSUM62
Xgapop 10.0 , Xgapext 0.5
Ygapop 10.0 , Ygapext 0.5
Fgapop 6.0 , Fgapext 7.0
Delop 6.0 , Delext 7.0

Searched: 2449703 seqs, 1841816367 residues

Total number of hits satisfying chosen parameters: 4899406

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Command line parameters:
-MODEL=frame+_p2n.model -DEV=xlh
-Q=/cgn2_1/USPTO_spool/US08978217/runat_10022004_133827_20514/app_query.fasta_1.1500
-DB=Published_Applications_NA -QFMT=fastap -SUFFIX=rnpb -MINMATCH=0.1
-LOOPCL=0 -LOOPEXT=0 -UNITS=bits -START=1 -END=-1 -MATRIX=blosum62
-TRANS=human40.cdi -LIST=45 -DOCALIGN=200 -THR_SCORE=pct -THR_MAX=100
-THR_MIN=0 -ALIGN=15 -MODE=LOCAL -OUTFMT=pto -NORM=ext -HEAPSIZE=500 -MINLEN=0
-MAXLEN=2000000000 -USER=US08978217_@CGN_1_1_690_@runat_10022004_133827_20514
-NCPU=6 -ICPU=3 -NO_MMAP -LARGEQUERY -NEG_SCORES=0 -WAIT -DSPBLOCK=100
-LONGLOG -DEV_TIMEOUT=120 -WARN_TIMEOUT=30 -THREADS=1 -XGAPOP=10 -XGAPEXT=0.5
-FGAPOP=6 -FGAPEXT=7 -YGAPOP=10 -YGAPEXT=0.5 -DELOP=6 -DELEXT=7

Database : Published_Applications_NA:*
1: /cgn2_6/ptodata/1/pubpna/US07_PUBCOMB.seq:*
2: /cgn2_6/ptodata/1/pubpna/PCT_NEW_PUB.seq:*
3: /cgn2_6/ptodata/1/pubpna/US06_NEW_PUB.seq:*
4: /cgn2_6/ptodata/1/pubpna/US06_PUBCOMB.seq:*
5: /cgn2_6/ptodata/1/pubpna/US07_NEW_PUB.seq:*
6: /cgn2_6/ptodata/1/pubpna/PCTUS_PUBCOMB.seq:*
7: /cgn2_6/ptodata/1/pubpna/US08_NEW_PUB.seq:*
8: /cgn2_6/ptodata/1/pubpna/US08_PUBCOMB.seq:*
9: /cgn2_6/ptodata/1/pubpna/US09A_PUBCOMB.seq:*
10: /cgn2_6/ptodata/1/pubpna/US09B_PUBCOMB.seq:*
11: /cgn2_6/ptodata/1/pubpna/US09C_PUBCOMB.seq:*
12: /cgn2_6/ptodata/1/pubpna/US09_NEW_PUB.seq:*
13: /cgn2_6/ptodata/1/pubpna/US09_NEW_PUB.seq2:*
14: /cgn2_6/ptodata/1/pubpna/US10A_PUBCOMB.seq:*
15: /cgn2_6/ptodata/1/pubpna/US10B_PUBCOMB.seq:*
16: /cgn2_6/ptodata/1/pubpna/US10_NEW_PUB.seq:*
17: /cgn2_6/ptodata/1/pubpna/US60_NEW_PUB.seq:*
18: /cgn2_6/ptodata/1/pubpna/US60_PUBCOMB.seq:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	1980	100.0	1907	15	US-10-097-340-74	Sequence 74, Appl
2	1980	100.0	1915	10	US-09-964-824A-101	Sequence 101, App
3	1980	100.0	1915	10	US-09-964-824A-563	Sequence 563, App
4	1980	100.0	1915	10	US-09-880-107-3420	Sequence 3420, Ap
5	1980	100.0	1915	10	US-09-967-768A-192	Sequence 192, App
6	1980	100.0	1917	9	US-09-922-217-1105	Sequence 1105, Ap
7	1980	100.0	1917	14	US-10-025-380-1105	Sequence 1105, Ap
8	1980	100.0	1956	12	US-10-264-049-756	Sequence 756, App
9	1980	100.0	1996	9	US-09-925-301-207	Sequence 207, App
10	1654	83.5	2269	12	US-10-131-410-64	Sequence 64, Appl
c 11	1127	56.9	626	9	US-09-922-217-853	Sequence 853, App
c 12	1127	56.9	626	10	US-09-833-263-853	Sequence 853, App
c 13	1127	56.9	626	14	US-10-025-380-853	Sequence 853, App
c 14	1011	51.1	563	9	US-09-922-217-944	Sequence 944, App
c 15	1011	51.1	563	10	US-09-833-263-944	Sequence 944, App
c 16	1011	51.1	563	14	US-10-025-380-944	Sequence 944, App
17	903	45.6	502	9	US-09-604-287A-282	Sequence 282, App
18	903	45.6	502	10	US-09-339-338-282	Sequence 282, App
19	903	45.6	502	11	US-09-551-621-282	Sequence 282, App
20	903	45.6	502	13	US-10-124-805-282	Sequence 282, App
21	903	45.6	502	14	US-10-007-805-282	Sequence 282, App
22	903	45.6	502	15	US-10-076-622-282	Sequence 282, App
c 23	822	41.5	499	10	US-09-998-598-2290	Sequence 2290, Ap
c 24	652	32.9	437	10	US-09-998-598-2216	Sequence 2216, Ap
25	618	31.2	355	10	US-09-867-701-4818	Sequence 4818, Ap
26	558	28.2	1429	10	US-09-764-864-320	Sequence 320, App
27	556.5	28.1	1426	9	US-09-925-297-309	Sequence 309, App
28	556.5	28.1	1426	15	US-10-106-698-935	Sequence 935, App
c 29	554.5	28.0	1435	12	US-10-292-798-1601	Sequence 1601, Ap
c 30	554.5	28.0	1435	13	US-10-017-161-1953	Sequence 1953, Ap
c 31	519.5	26.2	852	9	US-09-759-143-44	Sequence 44, Appl
c 32	519.5	26.2	852	9	US-09-780-669-44	Sequence 44, Appl
c 33	519.5	26.2	852	9	US-09-030-606-44	Sequence 44, Appl
c 34	519.5	26.2	852	9	US-09-822-827-44	Sequence 44, Appl
c 35	519.5	26.2	852	9	US-09-115-453-44	Sequence 44, Appl
c 36	519.5	26.2	852	10	US-09-232-880-44	Sequence 44, Appl
c 37	519.5	26.2	852	10	US-09-895-793-44	Sequence 44, Appl
c 38	519.5	26.2	852	10	US-09-895-814-44	Sequence 44, Appl
c 39	519.5	26.2	852	13	US-10-144-670A-44	Sequence 44, Appl
c 40	519.5	26.2	852	13	US-10-294-025-44	Sequence 44, Appl
c 41	519.5	26.2	852	14	US-10-012-896-44	Sequence 44, Appl
c 42	519.5	26.2	852	15	US-10-010-940-44	Sequence 44, Appl
43	442	22.3	5045	10	US-09-974-298-12	Sequence 12, Appl
44	435.5	22.0	275	15	US-10-060-036-3261	Sequence 3261, Ap
c 45	435	22.0	440	10	US-09-960-352-11873	Sequence 11873, A

ALIGNMENTS

RESULT 1
US-10-097-340-74
; Sequence 74, Application US/10097340
; Publication No. US20030087250A1
; GENERAL INFORMATION:
; APPLICANT: John MONAHAN
; APPLICANT: Manjula GANNAVARAPU
; APPLICANT: Sebastian HOERSCH
; APPLICANT: Shubhangi KAMATKAR
; APPLICANT: Steve G. KOVATS
; APPLICANT: Rachel E. MEYERS
; APPLICANT: Michael MORRISEY
; APPLICANT: Peter OLANDT
; APPLICANT: Ami SEN
; APPLICANT: Peter VEIBY
; APPLICANT: Gordon B. MILLS
; APPLICANT: Robert C. BAST, Jr.
; APPLICANT: Karen LU
; APPLICANT: Rosemarie SCHMANDT
; APPLICANT: Xumei ZHAO
; APPLICANT: Karen GLATT
; TITLE OF INVENTION: Nucleic Acid Molecules and Proteins For The Identification,
; TITLE OF INVENTION: Assessment, Prevention, and Therapy of Ovarian Cancer
; FILE REFERENCE: MRI-030

```
;  CURRENT APPLICATION NUMBER: US/10/097,340
;  CURRENT FILING DATE:  2002-03-14
;  PRIOR APPLICATION NUMBER: 60/276,025
;  PRIOR FILING DATE: 2001-03-14
;  PRIOR APPLICATION NUMBER: 60/325,149
;  PRIOR FILING DATE: 2001-09-26
;  PRIOR APPLICATION NUMBER: 60/276,026
;  PRIOR FILING DATE: 2001-03-14
;  PRIOR APPLICATION NUMBER: 60/324,967
;  PRIOR FILING DATE: 2001/09/26
;  PRIOR APPLICATION NUMBER: 60/311,732
;  PRIOR FILING DATE: 2001-08-10
;  PRIOR APPLICATION NUMBER: 60/325,102
;  PRIOR FILING DATE: 2001-09-26
;  PRIOR APPLICATION NUMBER: 60/323,580
;  PRIOR FILING DATE: 2001-09-19
;  NUMBER OF SEQ ID NOS: 363
;  SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 74
;   LENGTH: 1907
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-10-097-340-74

Alignment Scores:
Pred. No.:                8.64e-212      Length:          1907
Score:                    1980.00        Matches:         371
Percent Similarity:       100.00%        Conservative:    0
Best Local Similarity:    100.00%        Mismatches:      0
Query Match:              100.00%        Indels:          0
DB:                       15             Gaps:            0

US-08-978-217-2 (1-371) x US-10-097-340-74 (1-1907)

Qy          1 MetAlaAlaThrCysGluIleSerAsnIlePheSerAsnTyrPheSerAlaMetTyrSer 20
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         96 ATGGCTGCAACCTGTGAGATTAGCAACATTTTTAGCAACTACTTCAGTGCGATGTACAGC 155

Qy         21 SerGluAspSerThrLeuAlaSerValProProAlaAlaThrPheGlyAlaAspAspLeu 40
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        156 TCGGAGGACTCCACCCTGGCCTCTGTTCCCCCTGCTGCCACCTTTGGGGCCGATGACTTG 215

Qy         41 ValLeuThrLeuSerAsnProGlnMetSerLeuGluGlyThrGluLysAlaSerTrpLeu 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        216 GTACTGACCCTGAGCAACCCCCAGATGTCATTGGAGGGTACAGAGAAGGCCAGCTGGTTG 275

Qy         61 GlyGluGlnProGlnPheTrpSerLysThrGlnValLeuAspTrpIleSerTyrGlnVal 80
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        276 GGGGAACAGCCCCAGTTCTGGTCGAAGACGCAGGTTCTGGACTGGATCAGCTACCAAGTG 335

Qy         81 GluLysAsnLysTyrAspAlaSerAlaIleAspPheSerArgCysAspMetAspGlyAla 100
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        336 GAGAAGAACAAGTACGACGCAAGCGCCATTGACTTCTCACGATGTGACATGGATGGCGCC 395

Qy        101 ThrLeuCysAsnCysAlaLeuGluGluLeuArgLeuValPheGlyProLeuGlyAspGln 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        396 ACCCTCTGCAATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGCCTCTGGGGGACCAA 455

Qy        121 LeuHisAlaGlnLeuArgAspLeuThrSerSerSerSerAspGluLeuSerTrpIleIle 140
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        456 CTCCATGCCCAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATT 515

Qy        141 GluLeuLeuGluLysAspGlyMetAlaPheGlnGluAlaLeuAspProGlyProPheAsp 160
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        516 GAGCTGCTGGAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCCTTTGAC 575

Qy        161 GlnGlySerProPheAlaGlnGluLeuLeuAspAspGlyGlnGlnAlaSerProTyrHis 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        576 CAGGGCAGCCCCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCAC 635

Qy        181 ProGlySerCysGlyAlaGlyAlaProSerProGlySerSerAspValSerThrAlaGly 200
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        636 CCCGGCAGCTGTGGCGCAGGAGCCCCCTCCCCTGGCAGCTCTGACGTCTCCACCGCAGGG 695

Qy        201 ThrGlyAlaSerArgSerSerHisSerSerAspSerGlyGlySerAspValAspLeuAsp 220
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        696 ACTGGTGCTTCTCGGAGCTCCCACTCCTCAGACTCCGGTGGAAGTGACGTGGACCTGGAT 755

Qy        221 ProThrAspGlyLysLeuPheProSerAspGlyPheArgAspCysLysLysGlyAspPro 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        756 CCCACTGATGGCAAGCTCTTCCCCAGCGATGGTTTTCGTGACTGCAAGAAGGGGGATCCC 815

Qy        241 LysHisGlyLysArgLysArgGlyArgProArgLysLeuSerLysGluTyrTrpAspCys 260
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        816 AAGCACGGGAAGCGGAAACGAGGCCGGCCCCGAAAGCTGAGCAAAGAGTACTGGGACTGT 875

Qy        261 LeuGluGlyLysLysSerLysHisAlaProArgGlyThrHisLeuTrpGluPheIleArg 280
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        876 CTCGAGGGCAAGAAGAGCAAGCACGCGCCCAGAGGCACCCACCTGTGGGAGTTCATCCGG 935

Qy        281 AspIleLeuIleHisProGluLeuAsnGluGlyLeuMetLysTrpGluAsnArgHisGlu 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        936 GACATCCTCATCCACCCGGAGCTCAACGAGGGCCTCATGAAGTGGGAGAATCGGCATGAA 995

Qy        301 GlyValPheLysPheLeuArgSerGluAlaValAlaGlnLeuTrpGlyGlnLysLysLys 320
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        996 GGCGTCTTCAAGTTCCTGCGCTCCGAGGCTGTGGCCCAACTATGGGGCCAAAAGAAAAAG 1055

Qy        321 AsnSerAsnMetThrTyrGluLysLeuSerArgAlaMetArgTyrTyrTyrLysArgGlu 340
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1056 AACAGCAACATGACCTACGAGAAGCTGAGCCGGGCCATGAGGTACTACTACAAACGGGAG 1115

Qy        341 IleLeuGluArgValAspGlyArgArgLeuValTyrLysPheGlyLysAsnSerSerGly 360
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1116 ATCCTGGAACGGGTGGATGGCCGGCGACTCGTCTACAAGTTTGGCAAAAACTCAAGCGGC 1175

Qy        361 TrpLysGluGluGluValLeuGlnSerArgAsn 371
              |||||||||||||||||||||||||||||||||
Db       1176 TGGAAGGAGGAAGAGGTTCTCCAGAGTCGGAAC 1208

RESULT 2
US-09-964-824A-101
; Sequence 101, Application US/09964824A
; Patent No. US20020102531A1
; GENERAL INFORMATION:
;  APPLICANT: Horrigan, Stephen
;  TITLE OF INVENTION: Cancer Gene Determination and Therapeutic Screening Using Signat
;  TITLE OF INVENTION:  Sets
;  FILE REFERENCE: 689290-73
;  CURRENT APPLICATION NUMBER: US/09/964,824A
;  CURRENT FILING DATE:  2001-09-27
;  PRIOR APPLICATION NUMBER: US/60/236,033
;  PRIOR FILING DATE: 2000-09-28
;  PRIOR APPLICATION NUMBER: US/60/236,032
;  PRIOR FILING DATE: 2000-09-28
;  PRIOR APPLICATION NUMBER: US/60/236,028
;  PRIOR FILING DATE: 2000-09-28
;  NUMBER OF SEQ ID NOS: 583
;  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 101
;   LENGTH: 1915
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-964-824A-101

Alignment Scores:
Pred. No.:                8.69e-212      Length:          1915
Score:                    1980.00        Matches:         371
Percent Similarity:       100.00%        Conservative:    0
Best Local Similarity:    100.00%        Mismatches:      0
Query Match:              100.00%        Indels:          0
DB:                       10             Gaps:            0

US-08-978-217-2 (1-371) x US-09-964-824A-101 (1-1915)

Qy          1 MetAlaAlaThrCysGluIleSerAsnIlePheSerAsnTyrPheSerAlaMetTyrSer 20
```

```
Db        120 ATGGCTGCAACCTGTGAGATTAGCAACATTTTTAGCAACTACTTCAGTGCGATGTACAGC 179

Qy         21 SerGluAspSerThrLeuAlaSerValProProAlaAlaThrPheGlyAlaAspAspLeu 40

Db        180 TCGGAGGACTCCACCCTGGCCTCTGTTCCCCCTGCTGCCACCTTTGGGGCCGATGACTTG 239

Qy         41 ValLeuThrLeuSerAsnProGlnMetSerLeuGluGlyThrGluLysAlaSerTrpLeu 60

Db        240 GTACTGACCCTGAGCAACCCCCAGATGTCATTGGAGGGTACAGAGAAGGCCAGCTGGTTG 299

Qy         61 GlyGluGlnProGlnPheTrpSerLysThrGlnValLeuAspTrpIleSerTyrGlnVal 80

Db        300 GGGGAACAGCCCCAGTTCTGGTCGAAGACGCAGGTTCTGGACTGGATCAGCTACCAAGTG 359

Qy         81 GluLysAsnLysTyrAspAlaSerAlaIleAspPheSerArgCysAspMetAspGlyAla 100

Db        360 GAGAAGAACAAGTACGACGCAAGCGCCATTGACTTCTCACGATGTGACATGGATGGCGCC 419

Qy        101 ThrLeuCysAsnCysAlaLeuGluGluLeuArgLeuValPheGlyProLeuGlyAspGln 120

Db        420 ACCCTCTGCAATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGCCTCTGGGGGACCAA 479

Qy        121 LeuHisAlaGlnLeuArgAspLeuThrSerSerSerSerAspGluLeuSerTrpIleIle 140

Db        480 CTCCATGCCCAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATT 539

Qy        141 GluLeuLeuGluLysAspGlyMetAlaPheGlnGluAlaLeuAspProGlyProPheAsp 160

Db        540 GAGCTGCTGGAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCCTTTGAC 599

Qy        161 GlnGlySerProPheAlaGlnGluLeuLeuAspAspGlyGlnGlnAlaSerProTyrHis 180

Db        600 CAGGGCAGCCCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCAC 659

Qy        181 ProGlySerCysGlyAlaGlyAlaProSerProGlySerSerAspValSerThrAlaGly 200

Db        660 CCCGGCAGCTGTGGCGCAGGAGCCCCCTCCCCTGGCAGCTCTGACGTCTCCACCGCAGGG 719

Qy        201 ThrGlyAlaSerArgSerSerHisSerSerAspSerGlyGlySerAspValAspLeuAsp 220

Db        720 ACTGGTGCTTCTCGGAGCTCCCACTCCTCAGACTCCGGTGGAAGTGACGTGGACCTGGAT 779

Qy        221 ProThrAspGlyLysLeuProSerAspGlyPheArgAspCysLysLysGlyAspPro 240

Db        780 CCCACTGATGGCAAGCTCTTCCCCAGCGATGGTTTTCGTGACTGCAAGAAGGGGGATCCC 839

Qy        241 LysHisGlyLysArgLysArgGlyArgProArgLysLeuSerLysGluTyrTrpAspCys 260

Db        840 AAGCACGGGAAGCGGAAACGAGGCCGGCCCCGAAAGCTGAGCAAAGAGTACTGGGACTGT 899

Qy        261 LeuGluGlyLysLysSerLysHisAlaProArgGlyThrHisLeuTrpGluPheIleArg 280

Db        900 CTCGAGGGCAAGAAGAGCAAGCACGCGCCCAGAGGCACCCACCTGTGGGAGTTCATCCGG 959

Qy        281 AspIleLeuIleHisProGluLeuAsnGluGlyLeuMetLysTrpGluAsnArgHisGlu 300

Db        960 GACATCCTCATCCACCCGGAGCTCAACGAGGGCCTCATGAAGTGGGAGAATCGGCATGAA 1019

Qy        301 GlyValPheLysPheLeuArgSerGluAlaValAlaGlnLeuTrpGlyGlnLysLysLys 320

Db       1020 GGCGTCTTCAAGTTCCTGCGCTCCGAGGCTGTGGCCCAACTATGGGGCCAAAAGAAAAAG 1079

Qy        321 AsnSerAsnMetThrTyrGluLysLeuSerArgAlaMetArgTyrTyrTyrLysArgGlu 340

Db       1080 AACAGCAACATGACCTACGAGAAGCTGAGCCGGGCCATGAGGTACTACTACAAACGGGAG 1139

Qy        341 IleLeuGluArgValAspGlyArgArgLeuValTyrLysPheGlyLysAsnSerSerGly 360

Db       1140 ATCCTGGAACGGGTGGATGGCCGGCGACTCGTCTACAAGTTTGGCAAAAACTCAAGCGGC 1199

Qy        361 TrpLysGluGluGluValLeuGlnSerArgAsn 371

Db       1200 TGGAAGGAGGAAGAGGTTCTCCAGAGTCGGAAC 1232
```

RESULT 3
US-09-964-824A-563
; Sequence 563, Application US/09964824A
; Patent No. US20020102531A1
; GENERAL INFORMATION:
; APPLICANT: Horrigan, Stephen
; TITLE OF INVENTION: Cancer Gene Determination and Therapeutic Screening Using Signati
; TITLE OF INVENTION: Sets
; FILE REFERENCE: 689290-73
; CURRENT APPLICATION NUMBER: US/09/964,824A
; CURRENT FILING DATE: 2001-09-27
; PRIOR APPLICATION NUMBER: US/60/236,033
; PRIOR FILING DATE: 2000-09-28
; PRIOR APPLICATION NUMBER: US/60/236,032
; PRIOR FILING DATE: 2000-09-28
; PRIOR APPLICATION NUMBER: US/60/236,028
; PRIOR FILING DATE: 2000-09-28
; NUMBER OF SEQ ID NOS: 583
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 563
; LENGTH: 1915
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-964-824A-563

Alignment Scores:

Pred. No.:	8.69e-212	Length:	1915
Score:	1980.00	Matches:	371
Percent Similarity:	100.00%	Conservative:	0
Best Local Similarity:	100.00%	Mismatches:	0
Query Match:	100.00%	Indels:	0
DB:	10	Gaps:	0

US-08-978-217-2 (1-371) x US-09-964-824A-563 (1-1915)

```
Qy          1 MetAlaAlaThrCysGluIleSerAsnIlePheSerAsnTyrPheSerAlaMetTyrSer 20

Db        120 ATGGCTGCAACCTGTGAGATTAGCAACATTTTTAGCAACTACTTCAGTGCGATGTACAGC 179

Qy         21 SerGluAspSerThrLeuAlaSerValProProAlaAlaThrPheGlyAlaAspAspLeu 40

Db        180 TCGGAGGACTCCACCCTGGCCTCTGTTCCCCCTGCTGCCACCTTTGGGGCCGATGACTTG 239

Qy         41 ValLeuThrLeuSerAsnProGlnMetSerLeuGluGlyThrGluLysAlaSerTrpLeu 60

Db        240 GTACTGACCCTGAGCAACCCCCAGATGTCATTGGAGGGTACAGAGAAGGCCAGCTGGTTG 299

Qy         61 GlyGluGlnProGlnPheTrpSerLysThrGlnValLeuAspTrpIleSerTyrGlnVal 80

Db        300 GGGGAACAGCCCCAGTTCTGGTCGAAGACGCAGGTTCTGGACTGGATCAGCTACCAAGTG 359

Qy         81 GluLysAsnLysTyrAspAlaSerAlaIleAspPheSerArgCysAspMetAspGlyAla 100

Db        360 GAGAAGAACAAGTACGACGCAAGCGCCATTGACTTCTCACGATGTGACATGGATGGCGCC 419

Qy        101 ThrLeuCysAsnCysAlaLeuGluGluLeuArgLeuValPheGlyProLeuGlyAspGln 120

Db        420 ACCCTCTGCAATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGCCTCTGGGGGACCAA 479

Qy        121 LeuHisAlaGlnLeuArgAspLeuThrSerSerSerSerAspGluLeuSerTrpIleIle 140

Db        480 CTCCATGCCCAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATT 539

Qy        141 GluLeuLeuGluLysAspGlyMetAlaPheGlnGluAlaLeuAspProGlyProPheAsp 160

Db        540 GAGCTGCTGGAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCCTTTGAC 599

Qy        161 GlnGlySerProPheAlaGlnGluLeuLeuAspAspGlyGlnGlnAlaSerProTyrHis 180

Db        600 CAGGGCAGCCCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCAC 659
```

```
Qy       181 ProGlySerCysGlyAlaGlyAlaProSerProGlySerSerAspValSerThrAlaGly 200
Db       660 CCCGGCAGCTGTGGCGCAGGAGCCCCCTCCCCTGGCAGCTCTGACGTCTCCACCGCAGGG 719

Qy       201 ThrGlyAlaSerArgSerSerHisSerSerAspSerGlyGlySerAspValAspLeuAsp 220
Db       720 ACTGGTGCTTCTCGGAGCTCCCACTCCTCAGACTCCGGTGGAAGTGACGTGGACCTGGAT 779

Qy       221 ProThrAspGlyLysLeuPheProSerAspGlyPheArgAspCysLysLysGlyAspPro 240
Db       780 CCCACTGATGGCAAGCTCTTCCCCAGCGATGGTTTTCGTGACTGCAAGAAGGGGGATCCC 839

Qy       241 LysHisGlyLysArgLysArgGlyArgProArgLysLeuSerLysGluTyrTrpAspCys 260
Db       840 AAGCACGGGAAGCGGAAACGAGGCCGGCCCCGAAAGCTGAGCAAAGAGTACTGGGACTGT 899

Qy       261 LeuGluGlyLysLysSerLysHisAlaProArgGlyThrHisLeuTrpGluPheIleArg 280
Db       900 CTCGAGGGCAAGAAGAGCAAGCACGCGCCCAGAGGCACCCACCTGTGGGAGTTCATCCGG 959

Qy       281 AspIleLeuIleHisProGluLeuAsnGluGlyLeuMetLysTrpGluAsnArgHisGlu 300
Db       960 GACATCCTCATCCACCCGGAGCTCAACGAGGGCCTCATGAAGTGGGAGAATCGGCATGAA 1019

Qy       301 GlyValPheLysPheLeuArgSerGluAlaValAlaGlnLeuTrpGlyGlnLysLysLys 320
Db      1020 GGCGTCTTCAAGTTCCTGCGCTCCGAGGCTGTGGCCCAACTATGGGGCCAAAAGAAAAAG 1079

Qy       321 AsnSerAsnMetThrTyrGluLysLeuSerArgAlaMetArgTyrTyrTyrLysArgGlu 340
Db      1080 AACAGCAACATGACCTACGAGAAGCTGAGCCGGGCCATGAGGTACTACTACAAACGGGAG 1139

Qy       341 IleLeuGluArgValAspGlyArgArgLeuValTyrLysPheGlyLysAsnSerSerGly 360
Db      1140 ATCCTGGAACGGGTGGATGGCCGGCGACTCGTCTACAAGTTTGGCAAAAACTCAAGCGGC 1199

Qy       361 TrpLysGluGluGluValLeuGlnSerArgAsn 371
Db      1200 TGGAAGGAGGAAGAGGTTCTCCAGAGTCGGAAC 1232

RESULT 4
US-09-880-107-3420
; Sequence 3420, Application US/09880107
; Patent No. US20020142981A1
; GENERAL INFORMATION:
;  APPLICANT: Horne, Darci T.
;  APPLICANT:  Vockley, Joseph G.
;  APPLICANT:  Scherf, Uwe
;  APPLICANT:  Gene Logic, Inc.
;  TITLE OF INVENTION: Gene Expression Profiles in Liver Cancer
;  FILE REFERENCE: 44921-5028-WO
;  CURRENT APPLICATION NUMBER: US/09/880,107
;  CURRENT FILING DATE:  2001-06-14
;  PRIOR APPLICATION NUMBER: US 60/211,379
;  PRIOR FILING DATE: 2000-06-14
;  PRIOR APPLICATION NUMBER: US 60/237,054
;  PRIOR FILING DATE: 2000-10-02
;  NUMBER OF SEQ ID NOS: 3950
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 3420
;   LENGTH: 1915
;   TYPE: DNA
;   ORGANISM: Homo sapiens
;   FEATURE:
;   OTHER INFORMATION: Genbank Accession No. US20020142981A1 U73843
US-09-880-107-3420

Alignment Scores:
Pred. No.:              8.69e-212       Length:         1915
Score:                  1980.00         Matches:        371
Percent Similarity:     100.00%         Conservative:   0
Best Local Similarity:  100.00%         Mismatches:     0
Query Match:            100.00%         Indels:         0

DB:                    10               Gaps:           0

US-08-978-217-2 (1-371) x US-09-880-107-3420 (1-1915)

Qy         1 MetAlaAlaThrCysGluIleSerAsnIlePheSerAsnTyrPheSerAlaMetTyrSer 20
Db       120 ATGGCTGCAACCTGTGAGATTAGCAACATTTTTAGCAACTACTTCAGTGCGATGTACAGC 179

Qy        21 SerGluAspSerThrLeuAlaSerValProProAlaAlaThrPheGlyAlaAspAspLeu 40
Db       180 TCGGAGGACTCCACCCTGGCCTCTGTTCCCCCTGCTGCCACCTTTGGGGCCGATGACTTG 239

Qy        41 ValLeuThrLeuSerAsnProGlnMetSerLeuGluGlyThrGluLysAlaSerTrpLeu 60
Db       240 GTACTGACCCTGAGCAACCCCCAGATGTCATTGGAGGGTACAGAGAAGGCCAGCTGGTTG 299

Qy        61 GlyGluGlnProGlnPheTrpSerLysThrGlnValLeuAspTrpIleSerTyrGlnVal 80
Db       300 GGGGAACAGCCCCAGTTCTGGTCGAAGACGCAGGTTCTGGACTGGATCAGCTACCAAGTG 359

Qy        81 GluLysAsnLysTyrAspAlaSerAlaIleAspPheSerArgCysAspMetAspGlyAla 100
Db       360 GAGAAGAACAAGTACGACGCAAGCGCCATTGACTTCTCACGATGTGACATGGATGGCGCC 419

Qy       101 ThrLeuCysAsnCysAlaLeuGluGluLeuArgLeuValPheGlyProLeuGlyAspGln 120
Db       420 ACCCTCTGCAATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGCCTCTGGGGGACCAA 479

Qy       121 LeuHisAlaGlnLeuArgAspLeuThrSerSerSerSerAspGluLeuSerTrpIleIle 140
Db       480 CTCCATGCCCAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATT 539

Qy       141 GluLeuLeuGluLysAspGlyMetAlaPheGlnGluAlaLeuAspProGlyProPheAsp 160
Db       540 GAGCTGCTGGAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCCTTTGAC 599

Qy       161 GlnGlySerProPheAlaGlnGluLeuLeuAspAspGlyGlnGlnAlaSerProTyrHis 180
Db       600 CAGGGCAGCCCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCAC 659

Qy       181 ProGlySerCysGlyAlaGlyAlaProSerProGlySerSerAspValSerThrAlaGly 200
Db       660 CCCGGCAGCTGTGGCGCAGGAGCCCCCTCCCCTGGCAGCTCTGACGTCTCCACCGCAGGG 719

Qy       201 ThrGlyAlaSerArgSerSerHisSerSerAspSerGlyGlySerAspValAspLeuAsp 220
Db       720 ACTGGTGCTTCTCGGAGCTCCCACTCCTCAGACTCCGGTGGAAGTGACGTGGACCTGGAT 779

Qy       221 ProThrAspGlyLysLeuPheProSerAspGlyPheArgAspCysLysLysGlyAspPro 240
Db       780 CCCACTGATGGCAAGCTCTTCCCCAGCGATGGTTTTCGTGACTGCAAGAAGGGGGATCCC 839

Qy       241 LysHisGlyLysArgLysArgGlyArgProArgLysLeuSerLysGluTyrTrpAspCys 260
Db       840 AAGCACGGGAAGCGGAAACGAGGCCGGCCCCGAAAGCTGAGCAAAGAGTACTGGGACTGT 899

Qy       261 LeuGluGlyLysLysSerLysHisAlaProArgGlyThrHisLeuTrpGluPheIleArg 280
Db       900 CTCGAGGGCAAGAAGAGCAAGCACGCGCCCAGAGGCACCCACCTGTGGGAGTTCATCCGG 959

Qy       281 AspIleLeuIleHisProGluLeuAsnGluGlyLeuMetLysTrpGluAsnArgHisGlu 300
Db       960 GACATCCTCATCCACCCGGAGCTCAACGAGGGCCTCATGAAGTGGGAGAATCGGCATGAA 1019

Qy       301 GlyValPheLysPheLeuArgSerGluAlaValAlaGlnLeuTrpGlyGlnLysLysLys 320
Db      1020 GGCGTCTTCAAGTTCCTGCGCTCCGAGGCTGTGGCCCAACTATGGGGCCAAAAGAAAAAG 1079

Qy       321 AsnSerAsnMetThrTyrGluLysLeuSerArgAlaMetArgTyrTyrTyrLysArgGlu 340
Db      1080 AACAGCAACATGACCTACGAGAAGCTGAGCCGGGCCATGAGGTACTACTACAAACGGGAG 1139

Qy       341 IleLeuGluArgValAspGlyArgArgLeuValTyrLysPheGlyLysAsnSerSerGly 360
```

```
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1140 ATCCTGGAACGGGTGGATGGCCGGCGACTCGTCTACAAGTTTGGCAAAAACTCAAGCGGC 1199

Qy        361 TrpLysGluGluGluValLeuGlnSerArgAsn 371
                ||||||||||||||||||||||||||||||||
Db       1200 TGGAAGGAGGAAGAGGTTCTCCAGAGTCGGAAC 1232

RESULT 5
US-09-967-768A-192
; Sequence 192, Application US/09967768A
; Patent No. US20020150877A1
; GENERAL INFORMATION:
;  APPLICANT: Augustus, Meena
;  TITLE OF INVENTION: Cancer Gene Determination and Therapeutic Screening Using Signatu
;  TITLE OF INVENTION:  Sets
;  FILE REFERENCE: 689290-72
;  CURRENT APPLICATION NUMBER: US/09/967,768A
;  CURRENT FILING DATE:  2001-09-28
;  PRIOR APPLICATION NUMBER: US/60/236,109
;  PRIOR FILING DATE: 2000-09-28
;  PRIOR APPLICATION NUMBER: US/60/236,034
;  PRIOR FILING DATE: 2000-09-28
;  PRIOR APPLICATION NUMBER: US/60/236,111
;  PRIOR FILING DATE: 2000-09-28
;  NUMBER OF SEQ ID NOS: 325
;  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 192
;   LENGTH: 1915
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-967-768A-192

Alignment Scores:
Pred. No.:              8.69e-212       Length:         1915
Score:                  1980.00         Matches:        371
Percent Similarity:     100.00%         Conservative:   0
Best Local Similarity:  100.00%         Mismatches:     0
Query Match:            100.00%         Indels:         0
DB:                     10              Gaps:           0

US-08-978-217-2 (1-371) x US-09-967-768A-192 (1-1915)

Qy          1 MetAlaAlaThrCysGluIleSerAsnIlePheSerAsnTyrPheSerAlaMetTyrSer 20
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        120 ATGGCTGCAACCTGTGAGATTAGCAACATTTTTAGCAACTACTTCAGTGCGATGTACAGC 179

Qy         21 SerGluAspSerThrLeuAlaSerValProProAlaAlaThrPheGlyAlaAspAspLeu 40
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        180 TCGGAGGACTCCACCCTGGCCTCTGTTCCCCCTGCTGCCACCTTTGGGGCCGATGACTTG 239

Qy         41 ValLeuThrLeuSerAsnProGlnMetSerLeuGluGlyThrGluLysAlaSerTrpLeu 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        240 GTACTGACCCTGAGCAACCCCCAGATGTCATTGGAGGGTACAGAGAAGGCCAGCTGGTTG 299

Qy         61 GlyGluGlnProGlnPheTrpSerLysThrGlnValLeuAspTrpIleSerTyrGlnVal 80
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        300 GGGGAACAGCCCCAGTTCTGGTCGAAGACGCAGGTTCTGGACTGGATCAGCTACCAAGTG 359

Qy         81 GluLysAsnLysTyrAspAlaSerAlaIleAspPheSerArgCysAspMetAspGlyAla 100
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        360 GAGAAGAACAAGTACGACGCAAGCGCCATTGACTTCTCACGATGTGACATGGATGGCGCC 419

Qy        101 ThrLeuCysAsnCysAlaLeuGluGluLeuArgLeuValPheGlyProLeuGlyAspGln 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        420 ACCCTCTGCAATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGCCTCTGGGGGACCAA 479

Qy        121 LeuHisAlaGlnLeuArgAspLeuThrSerSerSerSerAspGluLeuSerTrpIleIle 140
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        480 CTCCATGCCCAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATT 539

Qy        141 GluLeuLeuGluLysAspGlyMetAlaPheGlnGluAlaLeuAspProGlyProPheAsp 160
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        540 GAGCTGCTGGAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCCTTTGAC 599

Qy        161 GlnGlySerProPheAlaGlnGluLeuLeuAspAspGlyGlnGlnAlaSerProTyrHis 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        600 CAGGGCAGCCCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCAC 659

Qy        181 ProGlySerCysGlyAlaGlyAlaProSerProGlySerSerAspValSerThrAlaGly 200
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        660 CCCGGCAGCTGTGGCGCAGGAGCCCCCTCCCCTGGCAGCTCTGACGTCTCCACCGCAGGG 719

Qy        201 ThrGlyAlaSerArgSerSerHisSerSerAspSerGlyGlySerAspValAspLeuAsp 220
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        720 ACTGGTGCTTCTCGGAGCTCCCACTCCTCAGACTCCGGTGGAAGTGACGTGGACCTGGAT 779

Qy        221 ProThrAspGlyLysLeuProSerAspGlyPheArgAspCysLysLysGlyAspPro 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        780 CCCACTGATGGCAAGCTCTTCCCCAGCGATGGTTTTCGTGACTGCAAGAAGGGGGATCCC 839

Qy        241 LysHisGlyLysArgLysArgGlyArgProArgLysLeuSerLysGluTyrTrpAspCys 260
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        840 AAGCACGGGAAGCGGAAACGAGGCCGGCCCCGAAAGCTGAGCAAAGAGTACTGGGACTGT 899

Qy        261 LeuGluGlyLysLysSerLysHisAlaProArgGlyThrHisLeuTrpGluPheIleArg 280
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        900 CTCGAGGGCAAGAAGAGCAAGCACGCGCCCAGAGGCACCCACCTGTGGGAGTTCATCCGG 959

Qy        281 AspIleLeuIleHisProGluLeuAsnGluGlyLeuMetLysTrpGluAsnArgHisGlu 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        960 GACATCCTCATCCACCCGGAGCTCAACGAGGGCCTCATGAAGTGGGAGAATCGGCATGAA 1019

Qy        301 GlyValPheLysPheLeuArgSerGluAlaValAlaGlnLeuTrpGlyGlnLysLysLys 320
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1020 GGCGTCTTCAAGTTCCTGCGCTCCGAGGCTGTGGCCCAACTATGGGGCCAAAAGAAAAAG 1079

Qy        321 AsnSerAsnMetThrTyrGluLysLeuSerArgAlaMetArgTyrTyrTyrLysArgGlu 340
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1080 AACAGCAACATGACCTACGAGAAGCTGAGCCGGGCCATGAGGTACTACTACAAACGGGAG 1139

Qy        341 IleLeuGluArgValAspGlyArgArgLeuValTyrLysPheGlyLysAsnSerSerGly 360
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1140 ATCCTGGAACGGGTGGATGGCCGGCGACTCGTCTACAAGTTTGGCAAAAACTCAAGCGGC 1199

Qy        361 TrpLysGluGluGluValLeuGlnSerArgAsn 371
                ||||||||||||||||||||||||||||||||
Db       1200 TGGAAGGAGGAAGAGGTTCTCCAGAGTCGGAAC 1232

RESULT 6
US-09-922-217-1105
; Sequence 1105, Application US/09922217
; Patent No. US20020076414A1
; GENERAL INFORMATION:
;  APPLICANT: Xu, Jiangchun
;  APPLICANT:  Lodes, Michael J.
;  APPLICANT:  Secrist, Heather
;  APPLICANT:  Benson, Darin R.
;  APPLICANT:  Meagher, Madeleine Joy
;  APPLICANT:  Stolk, John A.
;  APPLICANT:  Wang, Tongtong
;  APPLICANT:  Jiang, Yuqiu
;  APPLICANT:  Smith, Carole Lynn
;  APPLICANT:  King, Gordon E.
;  APPLICANT:  Wang, Aijun
;  APPLICANT:  Clapper, Jonathan D.
;  TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY AND DIAGNOSIS
;  TITLE OF INVENTION:  OF COLON CANCER AND METHODS FOR THEIR USE
;  FILE REFERENCE: 210121.471C13
;  CURRENT APPLICATION NUMBER: US/09/922,217
;  CURRENT FILING DATE:  2001-08-03
;  NUMBER OF SEQ ID NOS: 1124
;  SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 1105
;   LENGTH: 1917
;   TYPE: DNA
;   ORGANISM: Homo sapiens
```

```
US-09-922-217-1105

Alignment Scores:
Pred. No.:                8.71e-212       Length:          1917
Score:                    1980.00         Matches:         371
Percent Similarity:       100.00%         Conservative:    0
Best Local Similarity:    100.00%         Mismatches:      0
Query Match:              100.00%         Indels:          0
DB:                       9               Gaps:            0

US-08-978-217-2 (1-371) x US-09-922-217-1105 (1-1917)

Qy          1 MetAlaAlaThrCysGluIleSerAsnIlePheSerAsnTyrPheSerAlaMetTyrSer 20
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        122 ATGGCTGCAACCTGTGAGATTAGCAACATTTTTAGCAACTACTTCAGTGCGATGTACAGC 181

Qy         21 SerGluAspSerThrLeuAlaSerValProProAlaAlaThrPheGlyAlaAspAspLeu 40
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        182 TCGGAGGACTCCACCCTGGCCTCTGTTCCCCCTGCTGCCACCTTTGGGGCCGATGACTTG 241

Qy         41 ValLeuThrLeuSerAsnProGlnMetSerLeuGluGlyThrGluLysAlaSerTrpLeu 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        242 GTACTGACCCTGAGCAACCCCCAGATGTCATTGGAGGGTACAGAGAAGGCCAGCTGGTTG 301

Qy         61 GlyGluGlnProGlnPheTrpSerLysThrGlnValLeuAspTrpIleSerTyrGlnVal 80
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        302 GGGGAACAGCCCCAGTTCTGGTCGAAGACGCAGGTTCTGGACTGGATCAGCTACCAAGTG 361

Qy         81 GluLysAsnLysTyrAspAlaSerAlaIleAspPheSerArgCysAspMetAspGlyAla 100
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        362 GAGAAGAACAAGTACGACGCAAGCGCCATTGACTTCTCACGATGTGACATGGATGGCGCC 421

Qy        101 ThrLeuCysAsnCysAlaLeuGluGluLeuArgLeuValPheGlyProLeuGlyAspGln 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        422 ACCCTCTGCAATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGCCTCTGGGGGACCAA 481

Qy        121 LeuHisAlaGlnLeuArgAspLeuThrSerSerSerSerAspGluLeuSerTrpIleIle 140
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        482 CTCCATGCCCAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATT 541

Qy        141 GluLeuLeuGluLysAspGlyMetAlaPheGlnGluAlaLeuAspProGlyProPheAsp 160
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        542 GAGCTGCTGGAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCCTTTGAC 601

Qy        161 GlnGlySerProPheAlaGlnGluLeuLeuAspAspGlyGlnGlnAlaSerProTyrHis 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        602 CAGGGCAGCCCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCAC 661

Qy        181 ProGlySerCysGlyAlaGlyAlaProSerProGlySerSerAspValSerThrAlaGly 200
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        662 CCCGGCAGCTGTGGCGCAGGAGCCCCCTCCCCTGGCAGCTCTGACGTCTCCACCGCAGGG 721

Qy        201 ThrGlyAlaSerArgSerSerHisSerSerAspSerGlyGlySerAspValAspLeuAsp 220
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        722 ACTGGTGCTTCTCGGAGCTCCCACTCCTCAGACTCCGGTGGAAGTGACGTGGACCTGGAT 781

Qy        221 ProThrAspGlyLysLeuProSerAspGlyPheArgAspCysLysLysGlyAspPro 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        782 CCCACTGATGGCAAGCTCTTCCCCAGCGATGGTTTTCGTGACTGCAAGAAGGGGGATCCC 841

Qy        241 LysHisGlyLysArgLysArgGlyArgProArgLysLeuSerLysGluTyrTrpAspCys 260
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        842 AAGCACGGGAAGCGGAAACGAGGCCGGCCCCGAAAGCTGAGCAAAGAGTACTGGGACTGT 901

Qy        261 LeuGluGlyLysLysSerLysHisAlaProArgGlyThrHisLeuTrpGluPheIleArg 280
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        902 CTCGAGGGCAAGAAGAGCAAGCACGCGCCCAGAGGCACCCACCTGTGGGAGTTCATCCGG 961

Qy        281 AspIleLeuIleHisProGluLeuAsnGluGlyLeuMetLysTrpGluAsnArgHisGlu 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        962 GACATCCTCATCCACCCGGAGCTCAACGAGGGCCTCATGAAGTGGGAGAATCGGCATGAA 1021

Qy        301 GlyValPheLysPheLeuArgSerGluAlaValAlaGlnLeuTrpGlyGlnLysLysLys 320
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1022 GGCGTCTTCAAGTTCCTGCGCTCCGAGGCTGTGGCCCAACTATGGGGCCAAAAGAAAAAG 1081

Qy        321 AsnSerAsnMetThrTyrGluLysLeuSerArgAlaMetArgTyrTyrTyrLysArgGlu 340
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1082 AACAGCAACATGACCTACGAGAAGCTGAGCCGGGCCATGAGGTACTACTACAAACGGGAG 1141

Qy        341 IleLeuGluArgValAspGlyArgArgLeuValTyrLysPheGlyLysAsnSerSerGly 360
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1142 ATCCTGGAACGGGTGGATGGCCGGCGACTCGTCTACAAGTTTGGCAAAAACTCAAGCGGC 1201

Qy        361 TrpLysGluGluGluValLeuGlnSerArgAsn 371
              |||||||||||||||||||||||||||||||||
Db       1202 TGGAAGGAGGAAGAGGTTCTCCAGAGTCGGAAC 1234

RESULT 7
US-10-025-380-1105
; Sequence 1105, Application US/10025380
; Publication No. US20020182191A1
; GENERAL INFORMATION:
;  APPLICANT: Xu, Jiangchun
;  APPLICANT:  Lodes, Michael J.
;  APPLICANT:  Secrist, Heather
;  APPLICANT:  Benson, Darin R.
;  APPLICANT:  Meagher, Madeleine Joy
;  APPLICANT:  Stolk, John A.
;  APPLICANT:  Wang, Tongtong
;  APPLICANT:  Jiang, Yuqiu
;  APPLICANT:  Smith, Carole L.
;  APPLICANT:  King, Gordon E.
;  APPLICANT:  Wang, Aijun
;  APPLICANT:  Clapper, Jonathan D.
;  APPLICANT:  Skeiky, Yasir A. W.
;  APPLICANT:  Fanger, Gary R.
;  APPLICANT:  Vedvick Thomas S.
;  APPLICANT:  Carter, Darrick
;  TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY AND DIAGNOSIS
;  TITLE OF INVENTION:  OF COLON CANCER AND METHODS FOR THEIR USE
;  FILE REFERENCE: 210121.471C14
;  CURRENT APPLICATION NUMBER: US/10/025,380
;  CURRENT FILING DATE:  2001-12-19
;  NUMBER OF SEQ ID NOS: 1129
;  SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 1105
;   LENGTH: 1917
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-10-025-380-1105

Alignment Scores:
Pred. No.:                8.71e-212       Length:          1917
Score:                    1980.00         Matches:         371
Percent Similarity:       100.00%         Conservative:    0
Best Local Similarity:    100.00%         Mismatches:      0
Query Match:              100.00%         Indels:          0
DB:                       14              Gaps:            0

US-08-978-217-2 (1-371) x US-10-025-380-1105 (1-1917)

Qy          1 MetAlaAlaThrCysGluIleSerAsnIlePheSerAsnTyrPheSerAlaMetTyrSer 20
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        122 ATGGCTGCAACCTGTGAGATTAGCAACATTTTTAGCAACTACTTCAGTGCGATGTACAGC 181

Qy         21 SerGluAspSerThrLeuAlaSerValProProAlaAlaThrPheGlyAlaAspAspLeu 40
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        182 TCGGAGGACTCCACCCTGGCCTCTGTTCCCCCTGCTGCCACCTTTGGGGCCGATGACTTG 241

Qy         41 ValLeuThrLeuSerAsnProGlnMetSerLeuGluGlyThrGluLysAlaSerTrpLeu 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        242 GTACTGACCCTGAGCAACCCCCAGATGTCATTGGAGGGTACAGAGAAGGCCAGCTGGTTG 301

Qy         61 GlyGluGlnProGlnPheTrpSerLysThrGlnValLeuAspTrpIleSerTyrGlnVal 80
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
```

```
Db        302 GGGGAACAGCCCCAGTTCTGGTCGAAGACGCAGGTTCTGGACTGGATCAGCTACCAAGTG 361

Qy         81 GluLysAsnLysTyrAspAlaSerAlaIleAspPheSerArgCysAspMetAspGlyAla 100
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        362 GAGAAGAACAAGTACGACGCAAGCGCCATTGACTTCTCACGATGTGACATGGATGGCGCC 421

Qy        101 ThrLeuCysAsnCysAlaLeuGluGluLeuArgLeuValPheGlyProLeuGlyAspGln 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        422 ACCCTCTGCAATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGCCTCTGGGGGACCAA 481

Qy        121 LeuHisAlaGlnLeuArgAspLeuThrSerSerSerSerAspGluLeuSerTrpIleIle 140
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        482 CTCCATGCCCAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATT 541

Qy        141 GluLeuLeuGluLysAspGlyMetAlaPheGlnGluAlaLeuAspProGlyProPheAsp 160
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        542 GAGCTGCTGGAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCCTTTGAC 601

Qy        161 GlnGlySerProPheAlaGlnGluLeuLeuAspAspGlyGlnGlnAlaSerProTyrHis 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        602 CAGGGCAGCCCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCAC 661

Qy        181 ProGlySerCysGlyAlaGlyAlaProSerProGlySerSerAspValSerThrAlaGly 200
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        662 CCCGGCAGCTGTGGCGCAGGAGCCCCCTCCCCTGGCAGCTCTGACGTCTCCACCGCAGGG 721

Qy        201 ThrGlyAlaSerArgSerSerHisSerSerAspSerGlyGlySerAspValAspLeuAsp 220
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        722 ACTGGTGCTTCTCGGAGCTCCCACTCCTCAGACTCCGGTGGAAGTGACGTGGACCTGGAT 781

Qy        221 ProThrAspGlyLysLeuProSerAspGlyPheArgAspCysLysLysGlyAspPro 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        782 CCCACTGATGGCAAGCTCTTCCCCAGCGATGGTTTTCGTGACTGCAAGAAGGGGGATCCC 841

Qy        241 LysHisGlyLysArgLysArgGlyArgProArgLysLeuSerLysGluTyrTrpAspCys 260
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        842 AAGCACGGGAAGCGGAAACGAGGCCGGCCCCGAAAGCTGAGCAAAGAGTACTGGGACTGT 901

Qy        261 LeuGluGlyLysLysSerLysHisAlaProArgGlyThrHisLeuTrpGluPheIleArg 280
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        902 CTCGAGGGCAAGAAGAGCAAGCACGCGCCCAGAGGCACCCACCTGTGGGAGTTCATCCGG 961

Qy        281 AspIleLeuIleHisProGluLeuAsnGluGlyLeuMetLysTrpGluAsnArgHisGlu 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        962 GACATCCTCATCCACCCGGAGCTCAACGAGGGCCTCATGAAGTGGGAGAATCGGCATGAA 1021

Qy        301 GlyValPheLysPheLeuArgSerGluAlaValAlaGlnLeuTrpGlyGlnLysLysLys 320
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1022 GGCGTCTTCAAGTTCCTGCGCTCCGAGGCTGTGGCCCAACTATGGGGCCAAAAGAAAAAG 1081

Qy        321 AsnSerAsnMetThrTyrGluLysLeuSerArgAlaMetArgTyrTyrTyrLysArgGlu 340
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1082 AACAGCAACATGACCTACGAGAAGCTGAGCCGGGCCATGAGGTACTACTACAAACGGGAG 1141

Qy        341 IleLeuGluArgValAspGlyArgArgLeuValTyrLysPheGlyLysAsnSerSerGly 360
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1142 ATCCTGGAACGGGTGGATGGCCGGCGACTCGTCTACAAGTTTGGCAAAAACTCAAGCGGC 1201

Qy        361 TrpLysGluGluGluValLeuGlnSerArgAsn 371
              |||||||||||||||||||||||||||||||||
Db       1202 TGGAAGGAGGAAGAGGTTCTCCAGAGTCGGAAC 1234

RESULT 8
US-10-264-049-756
; Sequence 756, Application US/10264049
; Publication No. US20040005579A1
; GENERAL INFORMATION:
;  APPLICANT: Birse et al.
;  TITLE OF INVENTION: Nucleic Acids, Proteins, and Antibodies
;  FILE REFERENCE: PA133P1
;  CURRENT APPLICATION NUMBER: US/10/264,049
;  CURRENT FILING DATE:  2002-10-04
;  PRIOR APPLICATION NUMBER: PCT/US01/18569
;  PRIOR FILING DATE: 2001-06-07
;  PRIOR APPLICATION NUMBER: US 60/209,467
;  PRIOR FILING DATE: 2000-06-07
;  NUMBER OF SEQ ID NOS: 4360
;  SOFTWARE: PatentIn Ver. 3.1
; SEQ ID NO 756
;   LENGTH: 1956
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-10-264-049-756

Alignment Scores:
Pred. No.:                8.95e-212       Length:          1956
Score:                    1980.00         Matches:         371
Percent Similarity:       100.00%         Conservative:    0
Best Local Similarity:    100.00%         Mismatches:      0
Query Match:              100.00%         Indels:          0
DB:                       12              Gaps:            0

US-08-978-217-2 (1-371) x US-10-264-049-756 (1-1956)

Qy          1 MetAlaAlaThrCysGluIleSerAsnIlePheSerAsnTyrPheSerAlaMetTyrSer 20
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        161 ATGGCTGCAACCTGTGAGATTAGCAACATTTTTAGCAACTACTTCAGTGCGATGTACAGC 220

Qy         21 SerGluAspSerThrLeuAlaSerValProProAlaAlaThrPheGlyAlaAspAspLeu 40
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        221 TCGGAGGACTCCACCCTGGCCTCTGTTCCCCCTGCTGCCACCTTTGGGGCCGATGACTTG 280

Qy         41 ValLeuThrLeuSerAsnProGlnMetSerLeuGluGlyThrGluLysAlaSerTrpLeu 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        281 GTACTGACCCTGAGCAACCCCCAGATGTCATTGGAGGGTACAGAGAAGGCCAGCTGGTTG 340

Qy         61 GlyGluGlnProGlnPheTrpSerLysThrGlnValLeuAspTrpIleSerTyrGlnVal 80
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        341 GGGGAACAGCCCCAGTTCTGGTCGAAGACGCAGGTTCTGGACTGGATCAGCTACCAAGTG 400

Qy         81 GluLysAsnLysTyrAspAlaSerAlaIleAspPheSerArgCysAspMetAspGlyAla 100
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        401 GAGAAGAACAAGTACGACGCAAGCGCCATTGACTTCTCACGATGTGACATGGATGGCGCC 460

Qy        101 ThrLeuCysAsnCysAlaLeuGluGluLeuArgLeuValPheGlyProLeuGlyAspGln 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        461 ACCCTCTGCAATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGCCTCTGGGGGACCAA 520

Qy        121 LeuHisAlaGlnLeuArgAspLeuThrSerSerSerSerAspGluLeuSerTrpIleIle 140
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        521 CTCCATGCCCAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATT 580

Qy        141 GluLeuLeuGluLysAspGlyMetAlaPheGlnGluAlaLeuAspProGlyProPheAsp 160
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        581 GAGCTGCTGGAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCCTTTGAC 640

Qy        161 GlnGlySerProPheAlaGlnGluLeuLeuAspAspGlyGlnGlnAlaSerProTyrHis 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        641 CAGGGCAGCCCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCAC 700

Qy        181 ProGlySerCysGlyAlaGlyAlaProSerProGlySerSerAspValSerThrAlaGly 200
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        701 CCCGGCAGCTGTGGCGCAGGAGCCCCCTCCCCYGGCAGCTCTGACGTCTCCACCGCAGGG 760

Qy        201 ThrGlyAlaSerArgSerSerHisSerSerAspSerGlyGlySerAspValAspLeuAsp 220
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        761 ACTGGTGCTTCTCGGAGCTCCCACTCCTCAGACTCCGGTGGAAGTGACGTGGACCTGGAT 820

Qy        221 ProThrAspGlyLysLeuProSerAspGlyPheArgAspCysLysLysGlyAspPro 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        821 CCCACTGATGGCAAGCTCTTCCCCAGCGATGGTTTTCGTGACTGCAAGAAGGGGGATCCC 880

Qy        241 LysHisGlyLysArgLysArgGlyArgProArgLysLeuSerLysGluTyrTrpAspCys 260
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        881 AAGCACGGGAAGCGGAAACGAGGCCGGCCCCGAAAGCTGAGCAAAGAGTACTGGGACTGT 940
```

```
Qy        261 LeuGluGlyLysLysSerLysHisAlaProArgGlyThrHisLeuTrpGluPheIleArg 280
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        941 CTCGAGGGCAAGAAGAGCAAGCACGCGCCCAGAGGCACCCACCTGTGGGAGTTCATCCGG 1000

Qy        281 AspIleLeuIleHisProGluLeuAsnGluGlyLeuMetLysTrpGluAsnArgHisGlu 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1001 GACATCCTCATCCACCCGGAGCTYAACGAGGGCCTYATGAAGTGGGAGAATCGGCATGAA 1060

Qy        301 GlyValPheLysPheLeuArgSerGluAlaValAlaGlnLeuTrpGlyGlnLysLysLys 320
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1061 GGCGTCTTCAAGTTCCTGCGYTCCGAGGCTGTGGCCCAACTATGGGGCCAAAAGAAAAAG 1120

Qy        321 AsnSerAsnMetThrTyrGluLysLeuSerArgAlaMetArgTyrTyrTyrLysArgGlu 340
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1121 AACAGCAACATGACCTACGAGAAGCTGAGCCGGGCCATGAGGTACTACTACAAACGGGAG 1180

Qy        341 IleLeuGluArgValAspGlyArgArgLeuValTyrLysPheGlyLysAsnSerSerGly 360
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1181 ATCCTGGAACGGGTGGATGGCCGGCGACTCGTCTACAAGTTTGGCAAAAACTCAAGCGGC 1240

Qy        361 TrpLysGluGluGluValLeuGlnSerArgAsn 371
              |||||||||||||||||||||||||||||||||
Db       1241 TGGAAGGAGGAAGAGGTTCTCCAGAGTCGGAAC 1273

RESULT 9
US-09-925-301-207
; Sequence 207, Application US/09925301
; Patent No. US20020052308A1
; GENERAL INFORMATION:
;  APPLICANT: Rosen et al.
;  TITLE OF INVENTION: Nucleic Acids, Proteins and Antibodies
;  FILE REFERENCE: PA106
;  CURRENT APPLICATION NUMBER: US/09/925,301
;  CURRENT FILING DATE:  2001-08-10
;  PRIOR APPLICATION NUMBER: PCT/US00/05882
;  PRIOR FILING DATE: 2000-03-08
;  PRIOR APPLICATION NUMBER: 60/124,270
;  PRIOR FILING DATE: 1999-03-12
;  NUMBER OF SEQ ID NOS: 1694
;  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 207
;   LENGTH: 1996
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-925-301-207

Alignment Scores:
Pred. No.:              9.21e-212       Length:         1996
Score:                  1980.00         Matches:        371
Percent Similarity:     100.00%         Conservative:   0
Best Local Similarity:  100.00%         Mismatches:     0
Query Match:            100.00%         Indels:         0
DB:                     9               Gaps:           0

US-08-978-217-2 (1-371) x US-09-925-301-207 (1-1996)

Qy          1 MetAlaAlaThrCysGluIleSerAsnIlePheSerAsnTyrPheSerAlaMetTyrSer 20
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        141 ATGGCTGCAACCTGTGAGATTAGCAACATTTTTAGCAACTACTTCAGTGCGATGTACAGC 200

Qy         21 SerGluAspSerThrLeuAlaSerValProProAlaAlaThrPheGlyAlaAspAspLeu 40
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        201 TCGGAGGACTCCACCCTGGCCTCTGTTCCCCCTGCTGCCACCTTTGGGGCCGATGACTTG 260

Qy         41 ValLeuThrLeuSerAsnProGlnMetSerLeuGluGlyThrGluLysAlaSerTrpLeu 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        261 GTACTGACCCTGAGCAACCCCCAGATGTCATTGGAGGGTACAGAGAAGGCCAGCTGGTTG 320

Qy         61 GlyGluGlnProGlnPheTrpSerLysThrGlnValLeuAspTrpIleSerTyrGlnVal 80
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        321 GGGGAACAGCCCCAGTTCTGGTCGAAGACGCAGGTTCTGGACTGGATCAGCTACCAAGTG 380

Qy         81 GluLysAsnLysTyrAspAlaSerAlaIleAspPheSerArgCysAspMetAspGlyAla 100
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        381 GAGAAGAACAAGTACGACGCAAGCGCCATTGACTTCTCACGATGTGACATGGATGGCGCC 440

Qy        101 ThrLeuCysAsnCysAlaLeuGluGluLeuArgLeuValPheGlyProLeuGlyAspGln 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        441 ACCCTCTGCAATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGCCTCTGGGGGACCAA 500

Qy        121 LeuHisAlaGlnLeuArgAspLeuThrSerSerSerSerAspGluLeuSerTrpIleIle 140
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        501 CTCCATGCCCAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATT 560

Qy        141 GluLeuLeuGluLysAspGlyMetAlaPheGlnGluAlaLeuAspProGlyProPheAsp 160
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        561 GAGCTGCTGGAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCCTTTGAC 620

Qy        161 GlnGlySerProPheAlaGlnGluLeuLeuAspAspGlyGlnGlnAlaSerProTyrHis 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        621 CAGGGCAGCCCCCTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCAC 680

Qy        181 ProGlySerCysGlyAlaGlyAlaProSerProGlySerSerAspValSerThrAlaGly 200
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        681 CCCGGCAGCTGTGGCGCAGGAGCCCCCTCCCCYGGCAGCTCTGACGTCTCCACCGCAGGG 740

Qy        201 ThrGlyAlaSerArgSerSerHisSerSerAspSerGlyGlySerAspValAspLeuAsp 220
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        741 ACTGGTGCTTCTCGGAGCTCCCACTCCTCAGACTCCGGTGGAAGTGACGTGGACCTGGAT 800

Qy        221 ProThrAspGlyLysLeuProSerAspGlyPheArgAspCysLysLysGlyAspPro 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        801 CCCACTGATGGCAAGCTCTTCCCCAGCGATGGTTTTCGTGACTGCAAGAAGGGGGATCCC 860

Qy        241 LysHisGlyLysArgLysArgGlyArgProArgLysLeuSerLysGluTyrTrpAspCys 260
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        861 AAGCACGGGAAGCGGAAACGAGGCCGGCCCCGAAAGCTGAGCAAAGAGTACTGGGACTGT 920

Qy        261 LeuGluGlyLysLysSerLysHisAlaProArgGlyThrHisLeuTrpGluPheIleArg 280
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        921 CTCGAGGGCAAGAAGAGCAAGCACGCGCCCAGAGGCACCCACCTGTGGGAGTTCATCCGG 980

Qy        281 AspIleLeuIleHisProGluLeuAsnGluGlyLeuMetLysTrpGluAsnArgHisGlu 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        981 GACATCCTCATCCACCCGGAGCTCAACGAGGGCCTCATGAAGTGGGAGAATCGGCATGAA 1040

Qy        301 GlyValPheLysPheLeuArgSerGluAlaValAlaGlnLeuTrpGlyGlnLysLysLys 320
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1041 GGCGTCTTCAAGTTCCTGCGCTCCGAGGCTGTGGCCCAACTATGGGGCCAAAAGAAAAAG 1100

Qy        321 AsnSerAsnMetThrTyrGluLysLeuSerArgAlaMetArgTyrTyrTyrLysArgGlu 340
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1101 AACAGCAACATGACCTACGAGAAGCTGAGCCGGGCCATGAGGTACTACTACAAACGGGAG 1160

Qy        341 IleLeuGluArgValAspGlyArgArgLeuValTyrLysPheGlyLysAsnSerSerGly 360
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1161 ATCCTGGAACGGGTGGATGGCCGGCGACTCGTCTACAAGTTTGGCAAAAACTCAAGCGGC 1220

Qy        361 TrpLysGluGluGluValLeuGlnSerArgAsn 371
              |||||||||||||||||||||||||||||||||
Db       1221 TGGAAGGAGGAAGAGGTTCTCCAGAGTCGGAAC 1253

RESULT 10
US-10-131-410-64
; Sequence 64, Application US/10131410
; Publication No. US20030235915A1
; GENERAL INFORMATION:
;  APPLICANT: SPECHT, THOMAS
;  APPLICANT:  HINZMANN, BERND
;  APPLICANT:  SCHMITT, ARMIN
;  APPLICANT:  PILARSKY, CHRISTIAN
;  APPLICANT:  DAHL, EDGAR
;  APPLICANT:  ROSENTHAL, ANDRE
;  TITLE OF INVENTION: HUMAN NUCLEIC ACID SEQUENCES FROM TISSUE OF BREAST
;  TITLE OF INVENTION:  TUMORS
;  FILE REFERENCE: SCH-1763
```

```
;  CURRENT APPLICATION NUMBER: US/10/131,410
;  CURRENT FILING DATE:  2002-04-25
;  PRIOR APPLICATION NUMBER: 09/646,673
;  PRIOR FILING DATE: 2000-09-20
;  PRIOR APPLICATION NUMBER: PCT/DE99/00908
;  PRIOR FILING DATE: 1999-03-19
;  NUMBER OF SEQ ID NOS: 202
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 64
;   LENGTH: 2269
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-10-131-410-64

Alignment Scores:
Pred. No.:              3.98e-175       Length:         2269
Score:                  1654.00         Matches:        315
Percent Similarity:     99.37%          Conservative:   0
Best Local Similarity:  99.37%          Mismatches:     2
Query Match:            83.54%          Indels:         2
DB:                     12              Gaps:           0

US-08-978-217-2 (1-371) x US-10-131-410-64 (1-2269)

Qy         55 GluLysAlaSerTrpLeuGlyGluGlnProGlnPheTrpSerLysThrGlnValLeuAsp 74
              ||||||||||||||||||||||||||||||||||||||||||||||||||  ||||||||||||
Db         15 GAGAAGGCCAGCTGGTTGGGGGAACAGCCCCAGTTCTGGTCGAAGAG-CAGGTTCTGGAC 73

Qy         75 TrpIleSerTyrGlnValGluLysAsnLysTyrAspAlaSerAlaIleAspPheSerArg 94
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         74 TGGATCAGCTACCAAGTGGAGAAGAACAAGTACGACGCAAGCGCCATTGACTTCTCACGA 133

Qy         95 CysAspMetAspGlyAlaThrLeuCysAsnCysAlaLeuGluGluLeuArgLeuValPhe 114
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        134 TGTGACATGGATGGCGCCACCCTCTGCAATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTT 193

Qy        115 GlyProLeuGlyAspGlnLeuHisAlaGlnLeuArgAspLeuThrSerSerSerSerAsp 134
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        194 GGGCCTCTGGGGGACCAACTCCATGCCCAGCTGCGAGACCTCACTTCCAGCTCTTCTGAT 253

Qy        135 GluLeuSerTrpIleIleGluLeuLeuGluLysAspGlyMetAlaPheGlnGluAlaLeu 154
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        254 GAGCTCAGTTGGATCATTGAGCTGCTGGAGAAGGATGGCATGGCCTTCCAGGAGGCCCTA 313

Qy        155 AspProGlyProPheAspGlnGlySerProPheAlaGlnGluLeuLeuAspAspGlyGln 174
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        314 GACCCAGGGCCCTTTGACCAGGGCAGCCCCTTTGCCCAGGAGCTGCTGGACGACGGTCAG 373

Qy        175 GlnAlaSerProTyrHisProGlySerCysGlyAlaGlyAlaProSerProGlySerSer 194
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        374 CAAGCCAGCCCCTACCACCCCGGCAGCTGTGGCGCAGGAGCCCCCTCCCCTGGCAGCTCT 433

Qy        195 AspValSerThrAlaGlyThrGlyAlaSerArgSerSerHisSerSerAspSerGlyGly 214
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        434 GACGTCTCCACCGCAGGACT-GGTGCTTCTCGGAGCTCCCACTCCTCAGACTCCGGTGGA 492

Qy        215 SerAspValAspLeuAspProThrAspGlyLysLeuProSerAspGlyPheArgAsp 234
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        493 AGTGACGTGGACCTGGATCCCACTGATGGCAAGCTCTTCCCCAGCGATGGTTTTCGTGAC 552

Qy        235 CysLysLysGlyAspProLysHisGlyLysArgLysArgGlyArgProArgLysLeuSer 254
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        553 TGCAAGAAGGGGGATCCCAAGCACGGGAAGCGGAAACGAGGCCGGCCCCGAAAGCTGAGC 612

Qy        255 LysGluTyrTrpAspCysLeuGluGlyLysLysSerLysHisAlaProArgGlyThrHis 274
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        613 AAAGAGTACTGGGACTGTCTCGAGGGCAAGAAGAGCAAGCACGCGCCCAGAGGCACCCAC 672

Qy        275 LeuTrpGluPheIleArgAspIleLeuIleHisProGluLeuAsnGluGlyLeuMetLys 294
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        673 CTGTGGGAGTTCATCCGGGACATCCTCATCCACCCGGAGCTCAACGAGGGCCTCATGAAG 732

Qy        295 TrpGluAsnArgHisGluGlyValPheLysPheLeuArgSerGluAlaValAlaGlnLeu 314
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        733 TGGGAGAATCGGCATGAAGGCGTCTTCAAGTTCCTGCGCTCCGAGGCTGTGGCCCAACTA 792

Qy        315 TrpGlyGlnLysLysLysAsnSerAsnMetThrTyrGluLysLeuSerArgAlaMetArg 334
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        793 TGGGGCCAAAAGAAAAAGAACAGCAACATGACCTACGAGAAGCTGAGCCGGGCCATGAGG 852

Qy        335 TyrTyrTyrLysArgGluIleLeuGluArgValAspGlyArgArgLeuValTyrLysPhe 354
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        853 TACTACTACAAACGGGAGATCCTGGAACGGGTGGATGGCCGGCGACTCGTCTACAAGTTT 912

Qy        355 GlyLysAsnSerSerGlyTrpLysGluGluGluValLeuGlnSerArgAsn 371
              |||||||||||||||||||||||||||||||||||||||||||||||||||
Db        913 GGCAAAAACTCAAGCGGCTGGAAGGAGGAAGAGGTTCTCCAGAGTCGGAAC 963

RESULT 11
US-09-922-217-853/c
; Sequence 853, Application US/09922217
; Patent No. US20020076414A1
; GENERAL INFORMATION:
;  APPLICANT: Xu, Jiangchun
;  APPLICANT:  Lodes, Michael J.
;  APPLICANT:  Secrist, Heather
;  APPLICANT:  Benson, Darin R.
;  APPLICANT:  Meagher, Madeleine Joy
;  APPLICANT:  Stolk, John A.
;  APPLICANT:  Wang, Tongtong
;  APPLICANT:  Jiang, Yuqiu
;  APPLICANT:  Smith, Carole Lynn
;  APPLICANT:  King, Gordon E.
;  APPLICANT:  Wang, Aijun
;  APPLICANT:  Clapper, Jonathan D.
;  TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY AND DIAGNOSIS
;  TITLE OF INVENTION:  OF COLON CANCER AND METHODS FOR THEIR USE
;  FILE REFERENCE: 210121.471C13
;  CURRENT APPLICATION NUMBER: US/09/922,217
;  CURRENT FILING DATE:  2001-08-03
;  NUMBER OF SEQ ID NOS: 1124
;  SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 853
;   LENGTH: 626
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-922-217-853

Alignment Scores:
Pred. No.:              8.4e-117        Length:         626
Score:                  1127.00         Matches:        208
Percent Similarity:     100.00%         Conservative:   0
Best Local Similarity:  100.00%         Mismatches:     0
Query Match:            56.92%          Indels:         0
DB:                     9               Gaps:           0

US-08-978-217-2 (1-371) x US-09-922-217-853 (1-626)

Qy         53 GlyThrGluLysAlaSerTrpLeuGlyGluGlnProGlnPheTrpSerLysThrGlnVal 72
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        624 GGTACAGAGAAGGCCAGCTGGTTGGGGGAACAGCCCCAGTTCTGGTCGAAGACGCAGGTT 565

Qy         73 LeuAspTrpIleSerTyrGlnValGluLysAsnLysTyrAspAlaSerAlaIleAspPhe 92
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        564 CTGGACTGGATCAGCTACCAAGTGGAGAAGAACAAGTACGACGCAAGCGCCATTGACTTC 505

Qy         93 SerArgCysAspMetAspGlyAlaThrLeuCysAsnCysAlaLeuGluGluLeuArgLeu 112
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        504 TCACGATGTGACATGGATGGCGCCACCCTCTGCAATTGTGCCCTTGAGGAGCTGCGTCTG 445

Qy        113 ValPheGlyProLeuGlyAspGlnLeuHisAlaGlnLeuArgAspLeuThrSerSerSer 132
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        444 GTCTTTGGGCCTCTGGGGGACCAACTCCATGCCCAGCTGCGAGACCTCACTTCCAGCTCT 385

Qy        133 SerAspGluLeuSerTrpIleIleGluLeuLeuGluLysAspGlyMetAlaPheGlnGlu 152
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
```

```
Db        384 TCTGATGAGCTCAGTTGGATCATTGAGCTGCTGGAGAAGGATGGCATGGCCTTCCAGGAG 325

Qy        153 AlaLeuAspProGlyProPheAspGlnGlySerProPheAlaGlnGluLeuLeuAspAsp 172
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        324 GCCCTAGACCCAGGGCCCTTTGACCAGGGCAGCCCCTTTGCCCAGGAGCTGCTGGACGAC 265

Qy        173 GlyGlnGlnAlaSerProTyrHisProGlySerCysGlyAlaGlyAlaProSerProGly 192
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        264 GGTCAGCAAGCCAGCCCCTACCACCCCGGCAGCTGTGGCGCAGGAGCCCCCTCCCCCGGC 205

Qy        193 SerSerAspValSerThrAlaGlyThrGlyAlaSerArgSerSerHisSerSerAspSer 212
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        204 AGCTCTGACGTCTCCACCGCAGGGACTGGTGCTTCTCGGAGCTCCCACTCCTCAGACTCC 145

Qy        213 GlyGlySerAspValAspLeuAspProThrAspGlyLysLeuProSerAspGlyPhe 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        144 GGTGGAAGTGACGTGGACCTGGATCCCACTGATGGCAAGCTCTTCCCCAGCGATGGTTTT 85

Qy        233 ArgAspCysLysLysGlyAspProLysHisGlyLysArgLysArgGlyArgProArgLys 252
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         84 CGTGACTGCAAGAAGGGGGATCCCAAGCACGGGAAGCGGAAACGAGGCCGGCCCCGAAAG 25

Qy        253 LeuSerLysGluTyrTrpAspCys 260
              |||||||||||||||||||||||
Db         24 CTGAGCAAAGAGTACTGGGACTGT 1
```

RESULT 12
US-09-833-263-853/c
; Sequence 853, Application US/09833263
; Patent No. US20020110547A1
; GENERAL INFORMATION:
; APPLICANT: Wang, Aijun
; APPLICANT: Clapper, Jonathan D.
; APPLICANT: Stolk, John A.
; APPLICANT: Meagher, Madeleine J.
; TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY AND
; TITLE OF INVENTION: DIAGNOSIS OF COLON CANCER AND METHODS FOR THEIR USE
; FILE REFERENCE: 210121.471C12
; CURRENT APPLICATION NUMBER: US/09/833,263
; CURRENT FILING DATE: 2001-04-10
; NUMBER OF SEQ ID NOS: 1093
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 853
; LENGTH: 626
; TYPE: DNA
; ORGANISM: Homo sapien
US-09-833-263-853

Alignment Scores:

Pred. No.:	8.4e-117	Length:	626
Score:	1127.00	Matches:	208
Percent Similarity:	100.00%	Conservative:	0
Best Local Similarity:	100.00%	Mismatches:	0
Query Match:	56.92%	Indels:	0
DB:	10	Gaps:	0

US-08-978-217-2 (1-371) x US-09-833-263-853 (1-626)

```
Qy         53 GlyThrGluLysAlaSerTrpLeuGlyGluGlnProGlnPheTrpSerLysThrGlnVal 72
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        624 GGTACAGAGAAGGCCAGCTGGTTGGGGGAACAGCCCCAGTTCTGGTCGAAGACGCAGGTT 565

Qy         73 LeuAspTrpIleSerTyrGlnValGluLysAsnLysTyrAspAlaSerAlaIleAspPhe 92
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        564 CTGGACTGGATCAGCTACCAAGTGGAGAAGAACAAGTACGACGCAAGCGCCATTGACTTC 505

Qy         93 SerArgCysAspMetAspGlyAlaThrLeuCysAsnCysAlaLeuGluGluLeuArgLeu 112
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        504 TCACGATGTGACATGGATGGCGCCACCCTCTGCAATTGTGCCCTTGAGGAGCTGCGTCTG 445

Qy        113 ValPheGlyProLeuGlyAspGlnLeuHisAlaGlnLeuArgAspLeuThrSerSerSer 132
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        444 GTCTTTGGGCCTCTGGGGGACCAACTCCATGCCCAGCTGCGAGACCTCACTTCCAGCTCT 385
```

```
Qy        133 SerAspGluLeuSerTrpIleIleGluLeuLeuGluLysAspGlyMetAlaPheGlnGlu 152
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        384 TCTGATGAGCTCAGTTGGATCATTGAGCTGCTGGAGAAGGATGGCATGGCCTTCCAGGAG 325

Qy        153 AlaLeuAspProGlyProPheAspGlnGlySerProPheAlaGlnGluLeuLeuAspAsp 172
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        324 GCCCTAGACCCAGGGCCCTTTGACCAGGGCAGCCCCTTTGCCCAGGAGCTGCTGGACGAC 265

Qy        173 GlyGlnGlnAlaSerProTyrHisProGlySerCysGlyAlaGlyAlaProSerProGly 192
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        264 GGTCAGCAAGCCAGCCCCTACCACCCCGGCAGCTGTGGCGCAGGAGCCCCCTCCCCCGGC 205

Qy        193 SerSerAspValSerThrAlaGlyThrGlyAlaSerArgSerSerHisSerSerAspSer 212
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        204 AGCTCTGACGTCTCCACCGCAGGGACTGGTGCTTCTCGGAGCTCCCACTCCTCAGACTCC 145

Qy        213 GlyGlySerAspValAspLeuAspProThrAspGlyLysLeuProSerAspGlyPhe 232
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        144 GGTGGAAGTGACGTGGACCTGGATCCCACTGATGGCAAGCTCTTCCCCAGCGATGGTTTT 85

Qy        233 ArgAspCysLysLysGlyAspProLysHisGlyLysArgLysArgGlyArgProArgLys 252
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         84 CGTGACTGCAAGAAGGGGGATCCCAAGCACGGGAAGCGGAAACGAGGCCGGCCCCGAAAG 25

Qy        253 LeuSerLysGluTyrTrpAspCys 260
              |||||||||||||||||||||||
Db         24 CTGAGCAAAGAGTACTGGGACTGT 1
```

RESULT 13
US-10-025-380-853/c
; Sequence 853, Application US/10025380
; Publication No. US20020182191A1
; GENERAL INFORMATION:
; APPLICANT: Xu, Jiangchun
; APPLICANT: Lodes, Michael J.
; APPLICANT: Secrist, Heather
; APPLICANT: Benson, Darin R.
; APPLICANT: Meagher, Madeleine Joy
; APPLICANT: Stolk, John A.
; APPLICANT: Wang, Tongtong
; APPLICANT: Jiang, Yuqiu
; APPLICANT: Smith, Carole L.
; APPLICANT: King, Gordon E.
; APPLICANT: Wang, Aijun
; APPLICANT: Clapper, Jonathan D.
; APPLICANT: Skeiky, Yasir A. W.
; APPLICANT: Fanger, Gary R.
; APPLICANT: Vedvick Thomas S.
; APPLICANT: Carter, Darrick
; TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY AND DIAGNOSIS
; TITLE OF INVENTION: OF COLON CANCER AND METHODS FOR THEIR USE
; FILE REFERENCE: 210121.471C14
; CURRENT APPLICATION NUMBER: US/10/025,380
; CURRENT FILING DATE: 2001-12-19
; NUMBER OF SEQ ID NOS: 1129
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 853
; LENGTH: 626
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-025-380-853

Alignment Scores:

Pred. No.:	8.4e-117	Length:	626
Score:	1127.00	Matches:	208
Percent Similarity:	100.00%	Conservative:	0
Best Local Similarity:	100.00%	Mismatches:	0
Query Match:	56.92%	Indels:	0
DB:	14	Gaps:	0

US-08-978-217-2 (1-371) x US-10-025-380-853 (1-626)

```
Qy          53 GlyThrGluLysAlaSerTrpLeuGlyGluGlnProGlnPheTrpSerLysThrGlnVal 72
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         624 GGTACAGAGAAGGCCAGCTGGTTGGGGGAACAGCCCCAGTTCTGGTCGAAGACGCAGGTT 565

Qy          73 LeuAspTrpIleSerTyrGlnValGluLysAsnLysTyrAspAlaSerAlaIleAspPhe 92
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         564 CTGGACTGGATCAGCTACCAAGTGGAGAAGAACAAGTACGACGCAAGCGCCATTGACTTC 505

Qy          93 SerArgCysAspMetAspGlyAlaThrLeuCysAsnCysAlaLeuGluGluLeuArgLeu 112
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         504 TCACGATGTGACATGGATGGCGCCACCCTCTGCAATTGTGCCCTTGAGGAGCTGCGTCTG 445

Qy         113 ValPheGlyProLeuGlyAspGlnLeuHisAlaGlnLeuArgAspLeuThrSerSerSer 132
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         444 GTCTTTGGGCCTCTGGGGGACCAACTCCATGCCCAGCTGCGAGACCTCACTTCCAGCTCT 385

Qy         133 SerAspGluLeuSerTrpIleIleGluLeuLeuGluLysAspGlyMetAlaPheGlnGlu 152
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         384 TCTGATGAGCTCAGTTGGATCATTGAGCTGCTGGAGAAGGATGGCATGGCCTTCCAGGAG 325

Qy         153 AlaLeuAspProGlyProPheAspGlnGlySerProPheAlaGlnGluLeuLeuAspAsp 172
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         324 GCCCTAGACCCAGGGCCCTTTGACCAGGGCAGCCCCTTTGCCCAGGAGCTGCTGGACGAC 265

Qy         173 GlyGlnGlnAlaSerProTyrHisProGlySerCysGlyAlaGlyAlaProSerProGly 192
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         264 GGTCAGCAAGCCAGCCCCTACCACCCCGGCAGCTGTGGCGCAGGAGCCCCCTCCCCCGGC 205

Qy         193 SerSerAspValSerThrAlaGlyThrGlyAlaSerArgSerSerHisSerSerAspSer 212
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         204 AGCTCTGACGTCTCCACCGCAGGGACTGGTGCTTCTCGGAGCTCCCACTCCTCAGACTCC 145

Qy         213 GlyGlySerAspValAspLeuAspProThrAspGlyLysLeuProSerAspGlyPhe 232
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         144 GGTGGAAGTGACGTGGACCTGGATCCCACTGATGGCAAGCTCTTCCCCAGCGATGGTTTT 85

Qy         233 ArgAspCysLysLysGlyAspProLysHisGlyLysArgLysArgGlyArgProArgLys 252
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          84 CGTGACTGCAAGAAGGGGGATCCCAAGCACGGGAAGCGGAAACGAGGCCGGCCCCGAAAG 25

Qy         253 LeuSerLysGluTyrTrpAspCys 260
               |||||||||||||||||||||||
Db          24 CTGAGCAAAGAGTACTGGGACTGT 1
```

RESULT 14
US-09-922-217-944/c
; Sequence 944, Application US/09922217
; Patent No. US20020076414A1
; GENERAL INFORMATION:
; APPLICANT: Xu, Jiangchun
; APPLICANT: Lodes, Michael J.
; APPLICANT: Secrist, Heather
; APPLICANT: Benson, Darin R.
; APPLICANT: Meagher, Madeleine Joy
; APPLICANT: Stolk, John A.
; APPLICANT: Wang, Tongtong
; APPLICANT: Jiang, Yuqiu
; APPLICANT: Smith, Carole Lynn
; APPLICANT: King, Gordon E.
; APPLICANT: Wang, Aijun
; APPLICANT: Clapper, Jonathan D.
; TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY AND DIAGNOSIS
; TITLE OF INVENTION: OF COLON CANCER AND METHODS FOR THEIR USE
; FILE REFERENCE: 210121.471C13
; CURRENT APPLICATION NUMBER: US/09/922,217
; CURRENT FILING DATE: 2001-08-03
; NUMBER OF SEQ ID NOS: 1124
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 944
; LENGTH: 563
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-922-217-944

Alignment Scores:

Pred. No.:	7.4e-104	Length:	563
Score:	1011.00	Matches:	187
Percent Similarity:	100.00%	Conservative:	0
Best Local Similarity:	100.00%	Mismatches:	0
Query Match:	51.06%	Indels:	0
DB:	9	Gaps:	0

US-08-978-217-2 (1-371) x US-09-922-217-944 (1-563)

```
Qy          74 AspTrpIleSerTyrGlnValGluLysAsnLysTyrAspAlaSerAlaIleAspPheSer 93
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         562 GACTGGATCAGCTACCAAGTGGAGAAGAACAAGTACGACGCAAGCGCCATTGACTTCTCA 503

Qy          94 ArgCysAspMetAspGlyAlaThrLeuCysAsnCysAlaLeuGluGluLeuArgLeuVal 113
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         502 CGATGTGACATGGATGGCGCCACCCTCTGCAATTGTGCCCTTGAGGAGCTGCGTCTGGTC 443

Qy         114 PheGlyProLeuGlyAspGlnLeuHisAlaGlnLeuArgAspLeuThrSerSerSerSer 133
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         442 TTTGGGCCTCTGGGGGACCAACTCCATGCCCAGCTGCGAGACCTCACTTCCAGCTCTTCT 383

Qy         134 AspGluLeuSerTrpIleIleGluLeuLeuGluLysAspGlyMetAlaPheGlnGluAla 153
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         382 GATGAGCTCAGTTGGATCATTGAGCTGCTGGAGAAGGATGGCATGGCCTTCCAGGAGGCC 323

Qy         154 LeuAspProGlyProPheAspGlnGlySerProPheAlaGlnGluLeuLeuAspAspGly 173
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         322 CTAGACCCAGGGCCCTTTGACCAGGGCAGCCCCTTTGCCCAGGAGCTGCTGGACGACGGT 263

Qy         174 GlnGlnAlaSerProTyrHisProGlySerCysGlyAlaGlyAlaProSerProGlySer 193
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         262 CAGCAAGCCAGCCCCTACCACCCCGGCAGCTGTGGCGCAGGAGCCCCCTCCCCCGGCAGC 203

Qy         194 SerAspValSerThrAlaGlyThrGlyAlaSerArgSerSerHisSerSerAspSerGly 213
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         202 TCTGACGTCTCCACCGCAGGGACTGGTGCTTCTCGGAGCTCCCACTCCTCAGACTCCGGT 143

Qy         214 GlySerAspValAspLeuAspProThrAspGlyLysLeuProSerAspGlyPheArg 233
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         142 GGAAGTGACGTGGACCTGGATCCCACTGATGGCAAGCTCTTCCCCAGCGATGGTTTTCGT 83

Qy         234 AspCysLysLysGlyAspProLysHisGlyLysArgLysArgGlyArgProArgLysLeu 253
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          82 GACTGCAAGAAGGGGGATCCCAAGCACGGGAAGCGGAAACGAGGCCGGCCCCGAAAGCTG 23

Qy         254 SerLysGluTyrTrpAspCys 260
               |||||||||||||||||||||
Db          22 AGCAAAGAGTACTGGGACTGT 2
```

RESULT 15
US-09-833-263-944/c
; Sequence 944, Application US/09833263
; Patent No. US20020110547A1
; GENERAL INFORMATION:
; APPLICANT: Wang, Aijun
; APPLICANT: Clapper, Jonathan D.
; APPLICANT: Stolk, John A.
; APPLICANT: Meagher, Madeleine J.
; TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY AND
; TITLE OF INVENTION: DIAGNOSIS OF COLON CANCER AND METHODS FOR THEIR USE
; FILE REFERENCE: 210121.471C12
; CURRENT APPLICATION NUMBER: US/09/833,263
; CURRENT FILING DATE: 2001-04-10
; NUMBER OF SEQ ID NOS: 1093
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 944
; LENGTH: 563
; TYPE: DNA
; ORGANISM: Homo sapien
US-09-833-263-944

Alignment Scores:

Pred. No.:	7.4e-104	Length:	563
Score:	1011.00	Matches:	187
Percent Similarity:	100.00%	Conservative:	0
Best Local Similarity:	100.00%	Mismatches:	0
Query Match:	51.06%	Indels:	0
DB:	10	Gaps:	0

US-08-978-217-2 (1-371) x US-09-833-263-944 (1-563)

```
Qy         74 AspTrpIleSerTyrGlnValGluLysAsnLysTyrAspAlaSerAlaIleAspPheSer 93
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        562 GACTGGATCAGCTACCAAGTGGAGAAGAACAAGTACGACGCAAGCGCCATTGACTTCTCA 503

Qy         94 ArgCysAspMetAspGlyAlaThrLeuCysAsnCysAlaLeuGluGluLeuArgLeuVal 113
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        502 CGATGTGACATGGATGGCGCCACCCTCTGCAATTGTGCCCTTGAGGAGCTGCGTCTGGTC 443

Qy        114 PheGlyProLeuGlyAspGlnLeuHisAlaGlnLeuArgAspLeuThrSerSerSerSer 133
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        442 TTTGGGCCTCTGGGGGACCAACTCCATGCCCAGCTGCGAGACCTCACTTCCAGCTCTTCT 383

Qy        134 AspGluLeuSerTrpIleIleGluLeuLeuGluLysAspGlyMetAlaPheGlnGluAla 153
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        382 GATGAGCTCAGTTGGATCATTGAGCTGCTGGAGAAGGATGGCATGGCCTTCCAGGAGGCC 323

Qy        154 LeuAspProGlyProPheAspGlnGlySerProPheAlaGlnGluLeuLeuAspAspGly 173
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        322 CTAGACCCAGGGCCCTTTGACCAGGGCAGCCCCTTTGCCCAGGAGCTGCTGGACGACGGT 263

Qy        174 GlnGlnAlaSerProTyrHisProGlySerCysGlyAlaGlyAlaProSerProGlySer 193
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        262 CAGCAAGCCAGCCCCTACCACCCCGGCAGCTGTGGCGCAGGAGCCCCCTCCCCCGGCAGC 203

Qy        194 SerAspValSerThrAlaGlyThrGlyAlaSerArgSerSerHisSerSerAspSerGly 213
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        202 TCTGACGTCTCCACCGCAGGGACTGGTGCTTCTCGGAGCTCCCACTCCTCAGACTCCGGT 143

Qy        214 GlySerAspValAspLeuAspProThrAspGlyLysLeuProSerAspGlyPheArg 233
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        142 GGAAGTGACGTGGACCTGGATCCCACTGATGGCAAGCTCTTCCCCAGCGATGGTTTTCGT 83

Qy        234 AspCysLysLysGlyAspProLysHisGlyLysArgLysArgGlyArgProArgLysLeu 253
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         82 GACTGCAAGAAGGGGGATCCCAAGCACGGGAAGCGGAAACGAGGCCGGCCCCGAAAGCTG 23

Qy        254 SerLysGluTyrTrpAspCys 260
              ||||||||||||||||||||
Db         22 AGCAAAGAGTACTGGGACTGT 2
```

Search completed: February 13, 2004, 01:45:58
Job time : 598.395 secs

GenCore version 5.1.6

OM nucleic - nucleic search, using sw model

Run on: February 13, 2004, 01:27:22 ; Search time 393.438 Seconds
(without alignments)
10448.744 Million cell updates/sec

Title: US-08-978-217-1
Perfect score: 1116
Sequence: 1 ATGGCTGCAACCTGTGAGAT.....TTCTCCAGAGTCGGAACTGA 1116

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 2449703 seqs, 1841816367 residues

Total number of hits satisfying chosen parameters: 4899406

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Published_Applications_NA:*
1: /cgn2_6/ptodata/1/pubpna/US07_PUBCOMB.seq:*
2: /cgn2_6/ptodata/1/pubpna/PCT_NEW_PUB.seq:*
3: /cgn2_6/ptodata/1/pubpna/US06_NEW_PUB.seq:*
4: /cgn2_6/ptodata/1/pubpna/US06_PUBCOMB.seq:*
5: /cgn2_6/ptodata/1/pubpna/US07_NEW_PUB.seq:*
6: /cgn2_6/ptodata/1/pubpna/PCTUS_PUBCOMB.seq:*
7: /cgn2_6/ptodata/1/pubpna/US08_NEW_PUB.seq:*
8: /cgn2_6/ptodata/1/pubpna/US08_PUBCOMB.seq:*
9: /cgn2_6/ptodata/1/pubpna/US09A_PUBCOMB.seq:*
10: /cgn2_6/ptodata/1/pubpna/US09B_PUBCOMB.seq:*
11: /cgn2_6/ptodata/1/pubpna/US09C_PUBCOMB.seq:*
12: /cgn2_6/ptodata/1/pubpna/US09_NEW_PUB.seq:*
13: /cgn2_6/ptodata/1/pubpna/US09_NEW_PUB.seq2:*
14: /cgn2_6/ptodata/1/pubpna/US10A_PUBCOMB.seq:*
15: /cgn2_6/ptodata/1/pubpna/US10B_PUBCOMB.seq:*
16: /cgn2_6/ptodata/1/pubpna/US10_NEW_PUB.seq:*
17: /cgn2_6/ptodata/1/pubpna/US60_NEW_PUB.seq:*
18: /cgn2_6/ptodata/1/pubpna/US60_PUBCOMB.seq:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	1116	100.0	1907	15	US-10-097-340-74	Sequence 74, Appl
2	1116	100.0	1915	10	US-09-964-824A-101	Sequence 101, App
3	1116	100.0	1915	10	US-09-964-824A-563	Sequence 563, App
4	1116	100.0	1915	10	US-09-880-107-3420	Sequence 3420, Ap
5	1116	100.0	1915	10	US-09-967-768A-192	Sequence 192, App
6	1116	100.0	1917	9	US-09-922-217-1105	Sequence 1105, Ap
7	1116	100.0	1917	14	US-10-025-380-1105	Sequence 1105, Ap
8	1115.6	100.0	1996	9	US-09-925-301-207	Sequence 207, App
9	1114.4	99.9	1956	12	US-10-264-049-756	Sequence 756, App
10	933	83.6	2269	12	US-10-131-410-64	Sequence 64, Appl
c 11	624.4	55.9	626	9	US-09-922-217-853	Sequence 853, App
c 12	624.4	55.9	626	10	US-09-833-263-853	Sequence 853, App
c 13	624.4	55.9	626	14	US-10-025-380-853	Sequence 853, App
c 14	561.4	50.3	563	9	US-09-922-217-944	Sequence 944, App
c 15	561.4	50.3	563	10	US-09-833-263-944	Sequence 944, App
c 16	561.4	50.3	563	14	US-10-025-380-944	Sequence 944, App
17	499.4	44.7	502	9	US-09-604-287A-282	Sequence 282, App
18	499.4	44.7	502	10	US-09-339-338-282	Sequence 282, App
19	499.4	44.7	502	11	US-09-551-621-282	Sequence 282, App
20	499.4	44.7	502	13	US-10-124-805-282	Sequence 282, App
21	499.4	44.7	502	14	US-10-007-805-282	Sequence 282, App
22	499.4	44.7	502	15	US-10-076-622-282	Sequence 282, App
c 23	455	40.8	499	10	US-09-998-598-2290	Sequence 2290, Ap
c 24	372	33.3	437	10	US-09-998-598-2216	Sequence 2216, Ap
25	349	31.3	355	10	US-09-867-701-4818	Sequence 4818, Ap
26	236	21.1	275	15	US-10-060-036-3261	Sequence 3261, Ap
27	220	19.7	451	10	US-09-998-598-32	Sequence 32, Appl
c 28	199	17.8	1435	12	US-10-292-798-1601	Sequence 1601, Ap
c 29	199	17.8	1435	13	US-10-017-161-1953	Sequence 1953, Ap
c 30	175.6	15.7	440	10	US-09-960-352-11873	Sequence 11873, A
c 31	174	15.6	174	10	US-09-998-598-1740	Sequence 1740, Ap
c 32	173.8	15.6	852	9	US-09-759-143-44	Sequence 44, Appl
c 33	173.8	15.6	852	9	US-09-780-669-44	Sequence 44, Appl
c 34	173.8	15.6	852	9	US-09-030-606-44	Sequence 44, Appl
c 35	173.8	15.6	852	9	US-09-822-827-44	Sequence 44, Appl
c 36	173.8	15.6	852	9	US-09-115-453-44	Sequence 44, Appl
c 37	173.8	15.6	852	10	US-09-232-880-44	Sequence 44, Appl
c 38	173.8	15.6	852	10	US-09-895-793-44	Sequence 44, Appl
c 39	173.8	15.6	852	10	US-09-895-814-44	Sequence 44, Appl
c 40	173.8	15.6	852	13	US-10-144-678A-44	Sequence 44, Appl
c 41	173.8	15.6	852	13	US-10-294-025-44	Sequence 44, Appl
c 42	173.8	15.6	852	14	US-10-012-896-44	Sequence 44, Appl
c 43	173.8	15.6	852	15	US-10-010-940-44	Sequence 44, Appl
44	173.4	15.5	1426	9	US-09-925-297-309	Sequence 309, App
45	173.4	15.5	1426	15	US-10-106-698-935	Sequence 935, App

ALIGNMENTS

RESULT 1
US-10-097-340-74
; Sequence 74, Application US/10097340
; Publication No. US20030087250A1
; GENERAL INFORMATION:
; APPLICANT: John MONAHAN
; APPLICANT: Manjula GANNAVARAPU
; APPLICANT: Sebastian HOERSCH
; APPLICANT: Shubhangi KAMATKAR
; APPLICANT: Steve G. KOVATS
; APPLICANT: Rachel E. MEYERS
; APPLICANT: Michael MORRISEY
; APPLICANT: Peter OLANDT
; APPLICANT: Ami SEN
; APPLICANT: Peter VEIBY
; APPLICANT: Gordon B. MILLS
; APPLICANT: Robert C. BAST, Jr.
; APPLICANT: Karen LU
; APPLICANT: Rosemarie SCHMANDT
; APPLICANT: Xumei ZHAO
; APPLICANT: Karen GLATT
; TITLE OF INVENTION: Nucleic Acid Molecules and Proteins For The Identification,
; TITLE OF INVENTION: Assessment, Prevention, and Therapy of Ovarian Cancer
; FILE REFERENCE: MRI-030
; CURRENT APPLICATION NUMBER: US/10/097,340
; CURRENT FILING DATE: 2002-03-14
; PRIOR APPLICATION NUMBER: 60/276,025
; PRIOR FILING DATE: 2001-03-14
; PRIOR APPLICATION NUMBER: 60/325,149
; PRIOR FILING DATE: 2001-09-26
; PRIOR APPLICATION NUMBER: 60/276,026
; PRIOR FILING DATE: 2001-03-14
; PRIOR APPLICATION NUMBER: 60/324,967
; PRIOR FILING DATE: 2001/09/26
; PRIOR APPLICATION NUMBER: 60/311,732
; PRIOR FILING DATE: 2001-08-10
; PRIOR APPLICATION NUMBER: 60/325,102
; PRIOR FILING DATE: 2001-09-26

```
;  PRIOR APPLICATION NUMBER: 60/323,580
;  PRIOR FILING DATE: 2001-09-19
;  NUMBER OF SEQ ID NOS: 363
;  SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 74
;    LENGTH: 1907
;    TYPE: DNA
;    ORGANISM: Homo sapiens
US-10-097-340-74

  Query Match             100.0%;  Score 1116;  DB 15;  Length 1907;
  Best Local Similarity   100.0%;  Pred. No. 2e-313;
  Matches 1116;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 ATGGCTGCAACCTGTGAGATTAGCAACATTTTTAGCAACTACTTCAGTGCGATGTACAGC 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         96 ATGGCTGCAACCTGTGAGATTAGCAACATTTTTAGCAACTACTTCAGTGCGATGTACAGC 155

Qy         61 TCGGAGGACTCCACCCTGGCCTCTGTTCCCCCTGCTGCCACCTTTGGGGCCGATGACTTG 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        156 TCGGAGGACTCCACCCTGGCCTCTGTTCCCCCTGCTGCCACCTTTGGGGCCGATGACTTG 215

Qy        121 GTACTGACCCTGAGCAACCCCCAGATGTCATTGGAGGGTACAGAGAAGGCCAGCTGGTTG 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        216 GTACTGACCCTGAGCAACCCCCAGATGTCATTGGAGGGTACAGAGAAGGCCAGCTGGTTG 275

Qy        181 GGGGAACAGCCCCAGTTCTGGTCGAAGACGCAGGTTCTGGACTGGATCAGCTACCAAGTG 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        276 GGGGAACAGCCCCAGTTCTGGTCGAAGACGCAGGTTCTGGACTGGATCAGCTACCAAGTG 335

Qy        241 GAGAAGAACAAGTACGACGCAAGCGCCATTGACTTCTCACGATGTGACATGGATGGCGCC 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        336 GAGAAGAACAAGTACGACGCAAGCGCCATTGACTTCTCACGATGTGACATGGATGGCGCC 395

Qy        301 ACCCTCTGCAATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGCCTCTGGGGGACCAA 360
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        396 ACCCTCTGCAATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGCCTCTGGGGGACCAA 455

Qy        361 CTCCATGCCCAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATT 420
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        456 CTCCATGCCCAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATT 515

Qy        421 GAGCTGCTGGAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCCTTTGAC 480
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        516 GAGCTGCTGGAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCCTTTGAC 575

Qy        481 CAGGGCAGCCCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCAC 540
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        576 CAGGGCAGCCCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCAC 635

Qy        541 CCCGGCAGCTGTGGCGCAGGAGCCCCCTCCCCTGGCAGCTCTGACGTCTCCACCGCAGGG 600
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        636 CCCGGCAGCTGTGGCGCAGGAGCCCCCTCCCCTGGCAGCTCTGACGTCTCCACCGCAGGG 695

Qy        601 ACTGGTGCTTCTCGGAGCTCCCACTCCTCAGACTCCGGTGGAAGTGACGTGGACCTGGAT 660
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        696 ACTGGTGCTTCTCGGAGCTCCCACTCCTCAGACTCCGGTGGAAGTGACGTGGACCTGGAT 755

Qy        661 CCCACTGATGGCAAGCTCTTCCCCAGCGATGGTTTTCGTGACTGCAAGAAGGGGGATCCC 720
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        756 CCCACTGATGGCAAGCTCTTCCCCAGCGATGGTTTTCGTGACTGCAAGAAGGGGGATCCC 815

Qy        721 AAGCACGGGAAGCGGAAACGAGGCCGGCCCCGAAAGCTGAGCAAAGAGTACTGGGACTGT 780
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        816 AAGCACGGGAAGCGGAAACGAGGCCGGCCCCGAAAGCTGAGCAAAGAGTACTGGGACTGT 875

Qy        781 CTCGAGGGCAAGAAGAGCAAGCACGCGCCCAGAGGCACCCACCTGTGGGAGTTCATCCGG 840
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        876 CTCGAGGGCAAGAAGAGCAAGCACGCGCCCAGAGGCACCCACCTGTGGGAGTTCATCCGG 935

Qy        841 GACATCCTCATCCACCCGGAGCTCAACGAGGGCCTCATGAAGTGGGAGAATCGGCATGAA 900
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        936 GACATCCTCATCCACCCGGAGCTCAACGAGGGCCTCATGAAGTGGGAGAATCGGCATGAA 995

Qy        901 GGCGTCTTCAAGTTCCTGCGCTCCGAGGCTGTGGCCCAACTATGGGGCCAAAAGAAAAAG 960
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        996 GGCGTCTTCAAGTTCCTGCGCTCCGAGGCTGTGGCCCAACTATGGGGCCAAAAGAAAAAG 1055

Qy        961 AACAGCAACATGACCTACGAGAAGCTGAGCCGGGCCATGAGGTACTACTACAAACGGGAG 1020
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1056 AACAGCAACATGACCTACGAGAAGCTGAGCCGGGCCATGAGGTACTACTACAAACGGGAG 1115

Qy       1021 ATCCTGGAACGGGTGGATGGCCGGCGACTCGTCTACAAGTTTGGCAAAAACTCAAGCGGC 1080
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1116 ATCCTGGAACGGGTGGATGGCCGGCGACTCGTCTACAAGTTTGGCAAAAACTCAAGCGGC 1175

Qy       1081 TGGAAGGAGGAAGAGGTTCTCCAGAGTCGGAACTGA 1116
              ||||||||||||||||||||||||||||||||||||
Db       1176 TGGAAGGAGGAAGAGGTTCTCCAGAGTCGGAACTGA 1211


RESULT 2
US-09-964-824A-101
; Sequence 101, Application US/09964824A
; Patent No. US20020102531A1
; GENERAL INFORMATION:
;  APPLICANT: Horrigan, Stephen
;  TITLE OF INVENTION: Cancer Gene Determination and Therapeutic Screening Using Signat
;  TITLE OF INVENTION:  Sets
;  FILE REFERENCE: 689290-73
;  CURRENT APPLICATION NUMBER: US/09/964,824A
;  CURRENT FILING DATE:  2001-09-27
;  PRIOR APPLICATION NUMBER: US/60/236,033
;  PRIOR FILING DATE: 2000-09-28
;  PRIOR APPLICATION NUMBER: US/60/236,032
;  PRIOR FILING DATE: 2000-09-28
;  PRIOR APPLICATION NUMBER: US/60/236,028
;  PRIOR FILING DATE: 2000-09-28
;  NUMBER OF SEQ ID NOS: 583
;  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 101
;    LENGTH: 1915
;    TYPE: DNA
;    ORGANISM: Homo sapiens
US-09-964-824A-101

  Query Match             100.0%;  Score 1116;  DB 10;  Length 1915;
  Best Local Similarity   100.0%;  Pred. No. 2e-313;
  Matches 1116;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 ATGGCTGCAACCTGTGAGATTAGCAACATTTTTAGCAACTACTTCAGTGCGATGTACAGC 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       120 ATGGCTGCAACCTGTGAGATTAGCAACATTTTTAGCAACTACTTCAGTGCGATGTACAGC 179

Qy         61 TCGGAGGACTCCACCCTGGCCTCTGTTCCCCCTGCTGCCACCTTTGGGGCCGATGACTTG 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       180 TCGGAGGACTCCACCCTGGCCTCTGTTCCCCCTGCTGCCACCTTTGGGGCCGATGACTTG 239

Qy        121 GTACTGACCCTGAGCAACCCCCAGATGTCATTGGAGGGTACAGAGAAGGCCAGCTGGTTG 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       240 GTACTGACCCTGAGCAACCCCCAGATGTCATTGGAGGGTACAGAGAAGGCCAGCTGGTTG 299

Qy        181 GGGGAACAGCCCCAGTTCTGGTCGAAGACGCAGGTTCTGGACTGGATCAGCTACCAAGTG 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       300 GGGGAACAGCCCCAGTTCTGGTCGAAGACGCAGGTTCTGGACTGGATCAGCTACCAAGTG 359

Qy        241 GAGAAGAACAAGTACGACGCAAGCGCCATTGACTTCTCACGATGTGACATGGATGGCGCC 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       360 GAGAAGAACAAGTACGACGCAAGCGCCATTGACTTCTCACGATGTGACATGGATGGCGCC 419

Qy        301 ACCCTCTGCAATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGCCTCTGGGGGACCAA 360
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       420 ACCCTCTGCAATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGCCTCTGGGGGACCAA 479

Qy        361 CTCCATGCCCAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATT 420
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
```

```
Db        480 CTCCATGCCCAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATT 539

Qy        421 GAGCTGCTGGAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCCTTTGAC 480
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        540 GAGCTGCTGGAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCCTTTGAC 599

Qy        481 CAGGGCAGCCCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCAC 540
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        600 CAGGGCAGCCCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCAC 659

Qy        541 CCCGGCAGCTGTGGCGCAGGAGCCCCCTCCCCTGGCAGCTCTGACGTCTCCACCGCAGGG 600
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        660 CCCGGCAGCTGTGGCGCAGGAGCCCCCTCCCCTGGCAGCTCTGACGTCTCCACCGCAGGG 719

Qy        601 ACTGGTGCTTCTCGGAGCTCCCACTCCTCAGACTCCGGTGGAAGTGACGTGGACCTGGAT 660
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        720 ACTGGTGCTTCTCGGAGCTCCCACTCCTCAGACTCCGGTGGAAGTGACGTGGACCTGGAT 779

Qy        661 CCCACTGATGGCAAGCTCTTCCCCAGCGATGGTTTTCGTGACTGCAAGAAGGGGGATCCC 720
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        780 CCCACTGATGGCAAGCTCTTCCCCAGCGATGGTTTTCGTGACTGCAAGAAGGGGGATCCC 839

Qy        721 AAGCACGGGAAGCGGAAACGAGGCCGGCCCCGAAAGCTGAGCAAAGAGTACTGGGACTGT 780
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        840 AAGCACGGGAAGCGGAAACGAGGCCGGCCCCGAAAGCTGAGCAAAGAGTACTGGGACTGT 899

Qy        781 CTCGAGGGCAAGAAGAGCAAGCACGCGCCCAGAGGCACCCACCTGTGGGAGTTCATCCGG 840
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        900 CTCGAGGGCAAGAAGAGCAAGCACGCGCCCAGAGGCACCCACCTGTGGGAGTTCATCCGG 959

Qy        841 GACATCCTCATCCACCCGGAGCTCAACGAGGGCCTCATGAAGTGGGAGAATCGGCATGAA 900
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        960 GACATCCTCATCCACCCGGAGCTCAACGAGGGCCTCATGAAGTGGGAGAATCGGCATGAA 1019

Qy        901 GGCGTCTTCAAGTTCCTGCGCTCCGAGGCTGTGGCCCAACTATGGGGCCAAAAGAAAAAG 960
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1020 GGCGTCTTCAAGTTCCTGCGCTCCGAGGCTGTGGCCCAACTATGGGGCCAAAAGAAAAAG 1079

Qy        961 AACAGCAACATGACCTACGAGAAGCTGAGCCGGGCCATGAGGTACTACTACAAACGGGAG 1020
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1080 AACAGCAACATGACCTACGAGAAGCTGAGCCGGGCCATGAGGTACTACTACAAACGGGAG 1139

Qy       1021 ATCCTGGAACGGGTGGATGGCCGGCGACTCGTCTACAAGTTTGGCAAAAACTCAAGCGGC 1080
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1140 ATCCTGGAACGGGTGGATGGCCGGCGACTCGTCTACAAGTTTGGCAAAAACTCAAGCGGC 1199

Qy       1081 TGGAAGGAGGAAGAGGTTCTCCAGAGTCGGAACTGA 1116
              ||||||||||||||||||||||||||||||||||||
Db       1200 TGGAAGGAGGAAGAGGTTCTCCAGAGTCGGAACTGA 1235
```

```
RESULT 3
US-09-964-824A-563
; Sequence 563, Application US/09964824A
; Patent No. US20020102531A1
; GENERAL INFORMATION:
;  APPLICANT: Horrigan, Stephen
;  TITLE OF INVENTION: Cancer Gene Determination and Therapeutic Screening Using Signatu
;  TITLE OF INVENTION:  Sets
;  FILE REFERENCE: 689290-73
;  CURRENT APPLICATION NUMBER: US/09/964,824A
;  CURRENT FILING DATE:  2001-09-27
;  PRIOR APPLICATION NUMBER: US/60/236,033
;  PRIOR FILING DATE: 2000-09-28
;  PRIOR APPLICATION NUMBER: US/60/236,032
;  PRIOR FILING DATE: 2000-09-28
;  PRIOR APPLICATION NUMBER: US/60/236,028
;  PRIOR FILING DATE: 2000-09-28
;  NUMBER OF SEQ ID NOS: 583
;  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 563
;   LENGTH: 1915
;   TYPE: DNA
```

```
;   ORGANISM: Homo sapiens
US-09-964-824A-563

  Query Match           100.0%;  Score 1116;  DB 10;  Length 1915;
  Best Local Similarity  100.0%;  Pred. No. 2e-313;
  Matches 1116;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 ATGGCTGCAACCTGTGAGATTAGCAACATTTTTAGCAACTACTTCAGTGCGATGTACAGC 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        120 ATGGCTGCAACCTGTGAGATTAGCAACATTTTTAGCAACTACTTCAGTGCGATGTACAGC 179

Qy         61 TCGGAGGACTCCACCCTGGCCTCTGTTCCCCCTGCTGCCACCTTTGGGGCCGATGACTTG 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        180 TCGGAGGACTCCACCCTGGCCTCTGTTCCCCCTGCTGCCACCTTTGGGGCCGATGACTTG 239

Qy        121 GTACTGACCCTGAGCAACCCCCAGATGTCATTGGAGGGTACAGAGAAGGCCAGCTGGTTG 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        240 GTACTGACCCTGAGCAACCCCCAGATGTCATTGGAGGGTACAGAGAAGGCCAGCTGGTTG 299

Qy        181 GGGGAACAGCCCCAGTTCTGGTCGAAGACGCAGGTTCTGGACTGGATCAGCTACCAAGTG 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        300 GGGGAACAGCCCCAGTTCTGGTCGAAGACGCAGGTTCTGGACTGGATCAGCTACCAAGTG 359

Qy        241 GAGAAGAACAAGTACGACGCAAGCGCCATTGACTTCTCACGATGTGACATGGATGGCGCC 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        360 GAGAAGAACAAGTACGACGCAAGCGCCATTGACTTCTCACGATGTGACATGGATGGCGCC 419

Qy        301 ACCCTCTGCAATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGCCTCTGGGGGACCAA 360
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        420 ACCCTCTGCAATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGCCTCTGGGGGACCAA 479

Qy        361 CTCCATGCCCAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATT 420
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        480 CTCCATGCCCAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATT 539

Qy        421 GAGCTGCTGGAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCCTTTGAC 480
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        540 GAGCTGCTGGAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCCTTTGAC 599

Qy        481 CAGGGCAGCCCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCAC 540
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        600 CAGGGCAGCCCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCAC 659

Qy        541 CCCGGCAGCTGTGGCGCAGGAGCCCCCTCCCCTGGCAGCTCTGACGTCTCCACCGCAGGG 600
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        660 CCCGGCAGCTGTGGCGCAGGAGCCCCCTCCCCTGGCAGCTCTGACGTCTCCACCGCAGGG 719

Qy        601 ACTGGTGCTTCTCGGAGCTCCCACTCCTCAGACTCCGGTGGAAGTGACGTGGACCTGGAT 660
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        720 ACTGGTGCTTCTCGGAGCTCCCACTCCTCAGACTCCGGTGGAAGTGACGTGGACCTGGAT 779

Qy        661 CCCACTGATGGCAAGCTCTTCCCCAGCGATGGTTTTCGTGACTGCAAGAAGGGGGATCCC 720
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        780 CCCACTGATGGCAAGCTCTTCCCCAGCGATGGTTTTCGTGACTGCAAGAAGGGGGATCCC 839

Qy        721 AAGCACGGGAAGCGGAAACGAGGCCGGCCCCGAAAGCTGAGCAAAGAGTACTGGGACTGT 780
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        840 AAGCACGGGAAGCGGAAACGAGGCCGGCCCCGAAAGCTGAGCAAAGAGTACTGGGACTGT 899

Qy        781 CTCGAGGGCAAGAAGAGCAAGCACGCGCCCAGAGGCACCCACCTGTGGGAGTTCATCCGG 840
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        900 CTCGAGGGCAAGAAGAGCAAGCACGCGCCCAGAGGCACCCACCTGTGGGAGTTCATCCGG 959

Qy        841 GACATCCTCATCCACCCGGAGCTCAACGAGGGCCTCATGAAGTGGGAGAATCGGCATGAA 900
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        960 GACATCCTCATCCACCCGGAGCTCAACGAGGGCCTCATGAAGTGGGAGAATCGGCATGAA 1019

Qy        901 GGCGTCTTCAAGTTCCTGCGCTCCGAGGCTGTGGCCCAACTATGGGGCCAAAAGAAAAAG 960
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1020 GGCGTCTTCAAGTTCCTGCGCTCCGAGGCTGTGGCCCAACTATGGGGCCAAAAGAAAAAG 1079

Qy        961 AACAGCAACATGACCTACGAGAAGCTGAGCCGGGCCATGAGGTACTACTACAAACGGGAG 1020
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
```

```
Db       1080 AACAGCAACATGACCTACGAGAAGCTGAGCCGGGCCATGAGGTACTACTACAAACGGGAG 1139

Qy       1021 ATCCTGGAACGGGTGGATGGCCGGCGACTCGTCTACAAGTTTGGCAAAAACTCAAGCGGC 1080

Db       1140 ATCCTGGAACGGGTGGATGGCCGGCGACTCGTCTACAAGTTTGGCAAAAACTCAAGCGGC 1199

Qy       1081 TGGAAGGAGGAAGAGGTTCTCCAGAGTCGGAACTGA 1116

Db       1200 TGGAAGGAGGAAGAGGTTCTCCAGAGTCGGAACTGA 1235


RESULT 4
US-09-880-107-3420
; Sequence 3420, Application US/09880107
; Patent No. US20020142981A1
; GENERAL INFORMATION:
;  APPLICANT: Horne, Darci T.
;  APPLICANT:  Vockley, Joseph G.
;  APPLICANT:  Scherf, Uwe
;  APPLICANT:  Gene Logic, Inc.
;  TITLE OF INVENTION: Gene Expression Profiles in Liver Cancer
;  FILE REFERENCE: 44921-5028-WO
;  CURRENT APPLICATION NUMBER: US/09/880,107
;  CURRENT FILING DATE:  2001-06-14
;  PRIOR APPLICATION NUMBER: US 60/211,379
;  PRIOR FILING DATE: 2000-06-14
;  PRIOR APPLICATION NUMBER: US 60/237,054
;  PRIOR FILING DATE: 2000-10-02
;  NUMBER OF SEQ ID NOS: 3950
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 3420
;   LENGTH: 1915
;   TYPE: DNA
;   ORGANISM: Homo sapiens
;   FEATURE:
;   OTHER INFORMATION: Genbank Accession No. US20020142981A1 U73843
US-09-880-107-3420

  Query Match           100.0%;  Score 1116;  DB 10;  Length 1915;
  Best Local Similarity  100.0%;  Pred. No. 2e-313;
  Matches 1116;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 ATGGCTGCAACCTGTGAGATTAGCAACATTTTTAGCAACTACTTCAGTGCGATGTACAGC 60

Db        120 ATGGCTGCAACCTGTGAGATTAGCAACATTTTTAGCAACTACTTCAGTGCGATGTACAGC 179

Qy         61 TCGGAGGACTCCACCCTGGCCTCTGTTCCCCCTGCTGCCACCTTTGGGGCCGATGACTTG 120

Db        180 TCGGAGGACTCCACCCTGGCCTCTGTTCCCCCTGCTGCCACCTTTGGGGCCGATGACTTG 239

Qy        121 GTACTGACCCTGAGCAACCCCCAGATGTCATTGGAGGGTACAGAGAAGGCCAGCTGGTTG 180

Db        240 GTACTGACCCTGAGCAACCCCCAGATGTCATTGGAGGGTACAGAGAAGGCCAGCTGGTTG 299

Qy        181 GGGGAACAGCCCCAGTTCTGGTCGAAGACGCAGGTTCTGGACTGGATCAGCTACCAAGTG 240

Db        300 GGGGAACAGCCCCAGTTCTGGTCGAAGACGCAGGTTCTGGACTGGATCAGCTACCAAGTG 359

Qy        241 GAGAAGAACAAGTACGACGCAAGCGCCATTGACTTCTCACGATGTGACATGGATGGCGCC 300

Db        360 GAGAAGAACAAGTACGACGCAAGCGCCATTGACTTCTCACGATGTGACATGGATGGCGCC 419

Qy        301 ACCCTCTGCAATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGCCTCTGGGGGACCAA 360

Db        420 ACCCTCTGCAATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGCCTCTGGGGGACCAA 479

Qy        361 CTCCATGCCCAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATT 420

Db        480 CTCCATGCCCAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATT 539

Qy        421 GAGCTGCTGGAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCCTTTGAC 480

Db        540 GAGCTGCTGGAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCCTTTGAC 599

Qy        481 CAGGGCAGCCCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCAC 540

Db        600 CAGGGCAGCCCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCAC 659

Qy        541 CCCGGCAGCTGTGGCGCAGGAGCCCCCTCCCCTGGCAGCTCTGACGTCTCCACCGCAGGG 600

Db        660 CCCGGCAGCTGTGGCGCAGGAGCCCCCTCCCCTGGCAGCTCTGACGTCTCCACCGCAGGG 719

Qy        601 ACTGGTGCTTCTCGGAGCTCCCACTCCTCAGACTCCGGTGGAAGTGACGTGGACCTGGAT 660

Db        720 ACTGGTGCTTCTCGGAGCTCCCACTCCTCAGACTCCGGTGGAAGTGACGTGGACCTGGAT 779

Qy        661 CCCACTGATGGCAAGCTCTTCCCCAGCGATGGTTTTCGTGACTGCAAGAAGGGGGATCCC 720

Db        780 CCCACTGATGGCAAGCTCTTCCCCAGCGATGGTTTTCGTGACTGCAAGAAGGGGGATCCC 839

Qy        721 AAGCACGGGAAGCGGAAACGAGGCCGGCCCCGAAAGCTGAGCAAAGAGTACTGGGACTGT 780

Db        840 AAGCACGGGAAGCGGAAACGAGGCCGGCCCCGAAAGCTGAGCAAAGAGTACTGGGACTGT 899

Qy        781 CTCGAGGGCAAGAAGAGCAAGCACGCGCCCAGAGGCACCCACCTGTGGGAGTTCATCCGG 840

Db        900 CTCGAGGGCAAGAAGAGCAAGCACGCGCCCAGAGGCACCCACCTGTGGGAGTTCATCCGG 959

Qy        841 GACATCCTCATCCACCCGGAGCTCAACGAGGGCCTCATGAAGTGGGAGAATCGGCATGAA 900

Db        960 GACATCCTCATCCACCCGGAGCTCAACGAGGGCCTCATGAAGTGGGAGAATCGGCATGAA 1019

Qy        901 GGCGTCTTCAAGTTCCTGCGCTCCGAGGCTGTGGCCCAACTATGGGGCCAAAAGAAAAAG 960

Db       1020 GGCGTCTTCAAGTTCCTGCGCTCCGAGGCTGTGGCCCAACTATGGGGCCAAAAGAAAAAG 1079

Qy        961 AACAGCAACATGACCTACGAGAAGCTGAGCCGGGCCATGAGGTACTACTACAAACGGGAG 1020

Db       1080 AACAGCAACATGACCTACGAGAAGCTGAGCCGGGCCATGAGGTACTACTACAAACGGGAG 1139

Qy       1021 ATCCTGGAACGGGTGGATGGCCGGCGACTCGTCTACAAGTTTGGCAAAAACTCAAGCGGC 1080

Db       1140 ATCCTGGAACGGGTGGATGGCCGGCGACTCGTCTACAAGTTTGGCAAAAACTCAAGCGGC 1199

Qy       1081 TGGAAGGAGGAAGAGGTTCTCCAGAGTCGGAACTGA 1116

Db       1200 TGGAAGGAGGAAGAGGTTCTCCAGAGTCGGAACTGA 1235


RESULT 5
US-09-967-768A-192
; Sequence 192, Application US/09967768A
; Patent No. US20020150877A1
; GENERAL INFORMATION:
;  APPLICANT: Augustus, Meena
;  TITLE OF INVENTION: Cancer Gene Determination and Therapeutic Screening Using Signat
;  TITLE OF INVENTION:  Sets
;  FILE REFERENCE: 689290-72
;  CURRENT APPLICATION NUMBER: US/09/967,768A
;  CURRENT FILING DATE:  2001-09-28
;  PRIOR APPLICATION NUMBER: US/60/236,109
;  PRIOR FILING DATE: 2000-09-28
;  PRIOR APPLICATION NUMBER: US/60/236,034
;  PRIOR FILING DATE: 2000-09-28
;  PRIOR APPLICATION NUMBER: US/60/236,111
;  PRIOR FILING DATE: 2000-09-28
;  NUMBER OF SEQ ID NOS: 325
;  SOFTWARE: PatentIn version 3.0
; SEQ ID NO 192
;   LENGTH: 1915
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-967-768A-192

  Query Match           100.0%;  Score 1116;  DB 10;  Length 1915;
  Best Local Similarity  100.0%;  Pred. No. 2e-313;
```

```
  Matches 1116;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 ATGGCTGCAACCTGTGAGATTAGCAACATTTTTAGCAACTACTTCAGTGCGATGTACAGC 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        120 ATGGCTGCAACCTGTGAGATTAGCAACATTTTTAGCAACTACTTCAGTGCGATGTACAGC 179

Qy         61 TCGGAGGACTCCACCCTGGCCTCTGTTCCCCCTGCTGCCACCTTTGGGGCCGATGACTTG 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        180 TCGGAGGACTCCACCCTGGCCTCTGTTCCCCCTGCTGCCACCTTTGGGGCCGATGACTTG 239

Qy        121 GTACTGACCCTGAGCAACCCCCAGATGTCATTGGAGGGTACAGAGAAGGCCAGCTGGTTG 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        240 GTACTGACCCTGAGCAACCCCCAGATGTCATTGGAGGGTACAGAGAAGGCCAGCTGGTTG 299

Qy        181 GGGGAACAGCCCCAGTTCTGGTCGAAGACGCAGGTTCTGGACTGGATCAGCTACCAAGTG 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        300 GGGGAACAGCCCCAGTTCTGGTCGAAGACGCAGGTTCTGGACTGGATCAGCTACCAAGTG 359

Qy        241 GAGAAGAACAAGTACGACGCAAGCGCCATTGACTTCTCACGATGTGACATGGATGGCGCC 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        360 GAGAAGAACAAGTACGACGCAAGCGCCATTGACTTCTCACGATGTGACATGGATGGCGCC 419

Qy        301 ACCCTCTGCAATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGCCTCTGGGGGACCAA 360
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        420 ACCCTCTGCAATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGCCTCTGGGGGACCAA 479

Qy        361 CTCCATGCCCAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATT 420
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        480 CTCCATGCCCAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATT 539

Qy        421 GAGCTGCTGGAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCCTTTGAC 480
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        540 GAGCTGCTGGAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCCTTTGAC 599

Qy        481 CAGGGCAGCCCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCAC 540
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        600 CAGGGCAGCCCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCAC 659

Qy        541 CCCGGCAGCTGTGGCGCAGGAGCCCCCTCCCCTGGCAGCTCTGACGTCTCCACCGCAGGG 600
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        660 CCCGGCAGCTGTGGCGCAGGAGCCCCCTCCCCTGGCAGCTCTGACGTCTCCACCGCAGGG 719

Qy        601 ACTGGTGCTTCTCGGAGCTCCCACTCCTCAGACTCCGGTGGAAGTGACGTGGACCTGGAT 660
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        720 ACTGGTGCTTCTCGGAGCTCCCACTCCTCAGACTCCGGTGGAAGTGACGTGGACCTGGAT 779

Qy        661 CCCACTGATGGCAAGCTCTTCCCCAGCGATGGTTTTCGTGACTGCAAGAAGGGGGATCCC 720
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        780 CCCACTGATGGCAAGCTCTTCCCCAGCGATGGTTTTCGTGACTGCAAGAAGGGGGATCCC 839

Qy        721 AAGCACGGGAAGCGGAAACGAGGCCGGCCCCGAAAGCTGAGCAAAGAGTACTGGGACTGT 780
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        840 AAGCACGGGAAGCGGAAACGAGGCCGGCCCCGAAAGCTGAGCAAAGAGTACTGGGACTGT 899

Qy        781 CTCGAGGGCAAGAAGAGCAAGCACGCGCCCAGAGGCACCCACCTGTGGGAGTTCATCCGG 840
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        900 CTCGAGGGCAAGAAGAGCAAGCACGCGCCCAGAGGCACCCACCTGTGGGAGTTCATCCGG 959

Qy        841 GACATCCTCATCCACCCGGAGCTCAACGAGGGCCTCATGAAGTGGGAGAATCGGCATGAA 900
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        960 GACATCCTCATCCACCCGGAGCTCAACGAGGGCCTCATGAAGTGGGAGAATCGGCATGAA 1019

Qy        901 GGCGTCTTCAAGTTCCTGCGCTCCGAGGCTGTGGCCCAACTATGGGGCCAAAAGAAAAAG 960
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1020 GGCGTCTTCAAGTTCCTGCGCTCCGAGGCTGTGGCCCAACTATGGGGCCAAAAGAAAAAG 1079

Qy        961 AACAGCAACATGACCTACGAGAAGCTGAGCCGGGCCATGAGGTACTACTACAAACGGGAG 1020
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1080 AACAGCAACATGACCTACGAGAAGCTGAGCCGGGCCATGAGGTACTACTACAAACGGGAG 1139

Qy       1021 ATCCTGGAACGGGTGGATGGCCGGCGACTCGTCTACAAGTTTGGCAAAAACTCAAGCGGC 1080
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1140 ATCCTGGAACGGGTGGATGGCCGGCGACTCGTCTACAAGTTTGGCAAAAACTCAAGCGGC 1199

Qy       1081 TGGAAGGAGGAAGAGGTTCTCCAGAGTCGGAACTGA 1116
              ||||||||||||||||||||||||||||||||||||
Db       1200 TGGAAGGAGGAAGAGGTTCTCCAGAGTCGGAACTGA 1235


RESULT 6
US-09-922-217-1105
; Sequence 1105, Application US/09922217
; Patent No. US20020076414A1
; GENERAL INFORMATION:
;  APPLICANT: Xu, Jiangchun
;  APPLICANT:  Lodes, Michael J.
;  APPLICANT:  Secrist, Heather
;  APPLICANT:  Benson, Darin R.
;  APPLICANT:  Meagher, Madeleine Joy
;  APPLICANT:  Stolk, John A.
;  APPLICANT:  Wang, Tongtong
;  APPLICANT:  Jiang, Yuqiu
;  APPLICANT:  Smith, Carole Lynn
;  APPLICANT:  King, Gordon E.
;  APPLICANT:  Wang, Aijun
;  APPLICANT:  Clapper, Jonathan D.
;  TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY AND DIAGNOSIS
;  TITLE OF INVENTION:  OF COLON CANCER AND METHODS FOR THEIR USE
;  FILE REFERENCE: 210121.471C13
;  CURRENT APPLICATION NUMBER: US/09/922,217
;  CURRENT FILING DATE:  2001-08-03
;  NUMBER OF SEQ ID NOS: 1124
;  SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 1105
;   LENGTH: 1917
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-922-217-1105

  Query Match             100.0%;  Score 1116;  DB 9;  Length 1917;
  Best Local Similarity   100.0%;  Pred. No. 2e-313;
  Matches 1116;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 ATGGCTGCAACCTGTGAGATTAGCAACATTTTTAGCAACTACTTCAGTGCGATGTACAGC 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        122 ATGGCTGCAACCTGTGAGATTAGCAACATTTTTAGCAACTACTTCAGTGCGATGTACAGC 181

Qy         61 TCGGAGGACTCCACCCTGGCCTCTGTTCCCCCTGCTGCCACCTTTGGGGCCGATGACTTG 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        182 TCGGAGGACTCCACCCTGGCCTCTGTTCCCCCTGCTGCCACCTTTGGGGCCGATGACTTG 241

Qy        121 GTACTGACCCTGAGCAACCCCCAGATGTCATTGGAGGGTACAGAGAAGGCCAGCTGGTTG 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        242 GTACTGACCCTGAGCAACCCCCAGATGTCATTGGAGGGTACAGAGAAGGCCAGCTGGTTG 301

Qy        181 GGGGAACAGCCCCAGTTCTGGTCGAAGACGCAGGTTCTGGACTGGATCAGCTACCAAGTG 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        302 GGGGAACAGCCCCAGTTCTGGTCGAAGACGCAGGTTCTGGACTGGATCAGCTACCAAGTG 361

Qy        241 GAGAAGAACAAGTACGACGCAAGCGCCATTGACTTCTCACGATGTGACATGGATGGCGCC 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        362 GAGAAGAACAAGTACGACGCAAGCGCCATTGACTTCTCACGATGTGACATGGATGGCGCC 421

Qy        301 ACCCTCTGCAATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGCCTCTGGGGGACCAA 360
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        422 ACCCTCTGCAATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGCCTCTGGGGGACCAA 481

Qy        361 CTCCATGCCCAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATT 420
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        482 CTCCATGCCCAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATT 541

Qy        421 GAGCTGCTGGAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCCTTTGAC 480
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        542 GAGCTGCTGGAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCCTTTGAC 601

Qy        481 CAGGGCAGCCCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCAC 540
```

```
Db        602 CAGGGCAGCCCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCAC 661

Qy        541 CCCGGCAGCTGTGGCGCAGGAGCCCCCTCCCCTGGCAGCTCTGACGTCTCCACCGCAGGG 600

Db        662 CCCGGCAGCTGTGGCGCAGGAGCCCCCTCCCCTGGCAGCTCTGACGTCTCCACCGCAGGG 721

Qy        601 ACTGGTGCTTCTCGGAGCTCCCACTCCTCAGACTCCGGTGGAAGTGACGTGGACCTGGAT 660

Db        722 ACTGGTGCTTCTCGGAGCTCCCACTCCTCAGACTCCGGTGGAAGTGACGTGGACCTGGAT 781

Qy        661 CCCACTGATGGCAAGCTCTTCCCCAGCGATGGTTTTCGTGACTGCAAGAAGGGGGATCCC 720

Db        782 CCCACTGATGGCAAGCTCTTCCCCAGCGATGGTTTTCGTGACTGCAAGAAGGGGGATCCC 841

Qy        721 AAGCACGGGAAGCGGAAACGAGGCCGGCCCCGAAAGCTGAGCAAAGAGTACTGGGACTGT 780

Db        842 AAGCACGGGAAGCGGAAACGAGGCCGGCCCCGAAAGCTGAGCAAAGAGTACTGGGACTGT 901

Qy        781 CTCGAGGGCAAGAAGAGCAAGCACGCGCCCAGAGGCACCCACCTGTGGGAGTTCATCCGG 840

Db        902 CTCGAGGGCAAGAAGAGCAAGCACGCGCCCAGAGGCACCCACCTGTGGGAGTTCATCCGG 961

Qy        841 GACATCCTCATCCACCCGGAGCTCAACGAGGGCCTCATGAAGTGGGAGAATCGGCATGAA 900

Db        962 GACATCCTCATCCACCCGGAGCTCAACGAGGGCCTCATGAAGTGGGAGAATCGGCATGAA 1021

Qy        901 GGCGTCTTCAAGTTCCTGCGCTCCGAGGCTGTGGCCCAACTATGGGGCCAAAAGAAAAAG 960

Db       1022 GGCGTCTTCAAGTTCCTGCGCTCCGAGGCTGTGGCCCAACTATGGGGCCAAAAGAAAAAG 1081

Qy        961 AACAGCAACATGACCTACGAGAAGCTGAGCCGGGCCATGAGGTACTACTACAAACGGGAG 1020

Db       1082 AACAGCAACATGACCTACGAGAAGCTGAGCCGGGCCATGAGGTACTACTACAAACGGGAG 1141

Qy       1021 ATCCTGGAACGGGTGGATGGCCGGCGACTCGTCTACAAGTTTGGCAAAAACTCAAGCGGC 1080

Db       1142 ATCCTGGAACGGGTGGATGGCCGGCGACTCGTCTACAAGTTTGGCAAAAACTCAAGCGGC 1201

Qy       1081 TGGAAGGAGGAAGAGGTTCTCCAGAGTCGGAACTGA 1116

Db       1202 TGGAAGGAGGAAGAGGTTCTCCAGAGTCGGAACTGA 1237
```

```
RESULT 7
US-10-025-380-1105
; Sequence 1105, Application US/10025380
; Publication No. US20020182191A1
; GENERAL INFORMATION:
;  APPLICANT: Xu, Jiangchun
;  APPLICANT:  Lodes, Michael J.
;  APPLICANT:  Secrist, Heather
;  APPLICANT:  Benson, Darin R.
;  APPLICANT:  Meagher, Madeleine Joy
;  APPLICANT:  Stolk, John A.
;  APPLICANT:  Wang, Tongtong
;  APPLICANT:  Jiang, Yuqiu
;  APPLICANT:  Smith, Carole L.
;  APPLICANT:  King, Gordon E.
;  APPLICANT:  Wang, Aijun
;  APPLICANT:  Clapper, Jonathan D.
;  APPLICANT:  Skeiky, Yasir A. W.
;  APPLICANT:  Fanger, Gary R.
;  APPLICANT:  Vedvick Thomas S.
;  APPLICANT:  Carter, Darrick
;  TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY AND DIAGNOSIS
;  TITLE OF INVENTION:  OF COLON CANCER AND METHODS FOR THEIR USE
;  FILE REFERENCE: 210121.471C14
;  CURRENT APPLICATION NUMBER: US/10/025,380
;  CURRENT FILING DATE:  2001-12-19
;  NUMBER OF SEQ ID NOS: 1129
;  SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 1105
;  LENGTH: 1917
;  TYPE: DNA
;  ORGANISM: Homo sapiens
US-10-025-380-1105

  Query Match             100.0%;  Score 1116;  DB 14;  Length 1917;
  Best Local Similarity   100.0%;  Pred. No. 2e-313;
  Matches 1116;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 ATGGCTGCAACCTGTGAGATTAGCAACATTTTTAGCAACTACTTCAGTGCGATGTACAGC 60

Db        122 ATGGCTGCAACCTGTGAGATTAGCAACATTTTTAGCAACTACTTCAGTGCGATGTACAGC 181

Qy         61 TCGGAGGACTCCACCCTGGCCTCTGTTCCCCCTGCTGCCACCTTTGGGGCCGATGACTTG 120

Db        182 TCGGAGGACTCCACCCTGGCCTCTGTTCCCCCTGCTGCCACCTTTGGGGCCGATGACTTG 241

Qy        121 GTACTGACCCTGAGCAACCCCCAGATGTCATTGGAGGGTACAGAGAAGGCCAGCTGGTTG 180

Db        242 GTACTGACCCTGAGCAACCCCCAGATGTCATTGGAGGGTACAGAGAAGGCCAGCTGGTTG 301

Qy        181 GGGGAACAGCCCCAGTTCTGGTCGAAGACGCAGGTTCTGGACTGGATCAGCTACCAAGTG 240

Db        302 GGGGAACAGCCCCAGTTCTGGTCGAAGACGCAGGTTCTGGACTGGATCAGCTACCAAGTG 361

Qy        241 GAGAAGAACAAGTACGACGCAAGCGCCATTGACTTCTCACGATGTGACATGGATGGCGCC 300

Db        362 GAGAAGAACAAGTACGACGCAAGCGCCATTGACTTCTCACGATGTGACATGGATGGCGCC 421

Qy        301 ACCCTCTGCAATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGCCTCTGGGGGACCAA 360

Db        422 ACCCTCTGCAATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGCCTCTGGGGGACCAA 481

Qy        361 CTCCATGCCCAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATT 420

Db        482 CTCCATGCCCAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATT 541

Qy        421 GAGCTGCTGGAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCCTTTGAC 480

Db        542 GAGCTGCTGGAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCCTTTGAC 601

Qy        481 CAGGGCAGCCCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCAC 540

Db        602 CAGGGCAGCCCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCAC 661

Qy        541 CCCGGCAGCTGTGGCGCAGGAGCCCCCTCCCCTGGCAGCTCTGACGTCTCCACCGCAGGG 600

Db        662 CCCGGCAGCTGTGGCGCAGGAGCCCCCTCCCCTGGCAGCTCTGACGTCTCCACCGCAGGG 721

Qy        601 ACTGGTGCTTCTCGGAGCTCCCACTCCTCAGACTCCGGTGGAAGTGACGTGGACCTGGAT 660

Db        722 ACTGGTGCTTCTCGGAGCTCCCACTCCTCAGACTCCGGTGGAAGTGACGTGGACCTGGAT 781

Qy        661 CCCACTGATGGCAAGCTCTTCCCCAGCGATGGTTTTCGTGACTGCAAGAAGGGGGATCCC 720

Db        782 CCCACTGATGGCAAGCTCTTCCCCAGCGATGGTTTTCGTGACTGCAAGAAGGGGGATCCC 841

Qy        721 AAGCACGGGAAGCGGAAACGAGGCCGGCCCCGAAAGCTGAGCAAAGAGTACTGGGACTGT 780

Db        842 AAGCACGGGAAGCGGAAACGAGGCCGGCCCCGAAAGCTGAGCAAAGAGTACTGGGACTGT 901

Qy        781 CTCGAGGGCAAGAAGAGCAAGCACGCGCCCAGAGGCACCCACCTGTGGGAGTTCATCCGG 840

Db        902 CTCGAGGGCAAGAAGAGCAAGCACGCGCCCAGAGGCACCCACCTGTGGGAGTTCATCCGG 961

Qy        841 GACATCCTCATCCACCCGGAGCTCAACGAGGGCCTCATGAAGTGGGAGAATCGGCATGAA 900

Db        962 GACATCCTCATCCACCCGGAGCTCAACGAGGGCCTCATGAAGTGGGAGAATCGGCATGAA 1021

Qy        901 GGCGTCTTCAAGTTCCTGCGCTCCGAGGCTGTGGCCCAACTATGGGGCCAAAAGAAAAAG 960

Db       1022 GGCGTCTTCAAGTTCCTGCGCTCCGAGGCTGTGGCCCAACTATGGGGCCAAAAGAAAAAG 1081
```

```
Qy        961 AACAGCAACATGACCTACGAGAAGCTGAGCCGGGCCATGAGGTACTACTACAAACGGGAG 1020
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1082 AACAGCAACATGACCTACGAGAAGCTGAGCCGGGCCATGAGGTACTACTACAAACGGGAG 1141

Qy       1021 ATCCTGGAACGGGTGGATGGCCGGCGACTCGTCTACAAGTTTGGCAAAAACTCAAGCGGC 1080
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1142 ATCCTGGAACGGGTGGATGGCCGGCGACTCGTCTACAAGTTTGGCAAAAACTCAAGCGGC 1201

Qy       1081 TGGAAGGAGGAAGAGGTTCTCCAGAGTCGGAACTGA 1116
              |||||||||||||||||||||||||||||||||||
Db       1202 TGGAAGGAGGAAGAGGTTCTCCAGAGTCGGAACTGA 1237


RESULT 8
US-09-925-301-207
; Sequence 207, Application US/09925301
; Patent No. US20020052308A1
; GENERAL INFORMATION:
;  APPLICANT: Rosen et al.
;  TITLE OF INVENTION: Nucleic Acids, Proteins and Antibodies
;  FILE REFERENCE: PA106
;  CURRENT APPLICATION NUMBER: US/09/925,301
;  CURRENT FILING DATE:  2001-08-10
;  PRIOR APPLICATION NUMBER: PCT/US00/05882
;  PRIOR FILING DATE: 2000-03-08
;  PRIOR APPLICATION NUMBER: 60/124,270
;  PRIOR FILING DATE: 1999-03-12
;  NUMBER OF SEQ ID NOS: 1694
;  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 207
;   LENGTH: 1996
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-925-301-207

  Query Match            100.0%;  Score 1115.6;  DB 9;  Length 1996;
  Best Local Similarity   99.9%;  Pred. No. 2.7e-313;
  Matches 1115;  Conservative    1;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 ATGGCTGCAACCTGTGAGATTAGCAACATTTTTAGCAACTACTTCAGTGCGATGTACAGC 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        141 ATGGCTGCAACCTGTGAGATTAGCAACATTTTTAGCAACTACTTCAGTGCGATGTACAGC 200

Qy         61 TCGGAGGACTCCACCCTGGCCTCTGTTCCCCCTGCTGCCACCTTTGGGGCCGATGACTTG 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        201 TCGGAGGACTCCACCCTGGCCTCTGTTCCCCCTGCTGCCACCTTTGGGGCCGATGACTTG 260

Qy        121 GTACTGACCCTGAGCAACCCCCAGATGTCATTGGAGGGTACAGAGAAGGCCAGCTGGTTG 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        261 GTACTGACCCTGAGCAACCCCCAGATGTCATTGGAGGGTACAGAGAAGGCCAGCTGGTTG 320

Qy        181 GGGGAACAGCCCCAGTTCTGGTCGAAGACGCAGGTTCTGGACTGGATCAGCTACCAAGTG 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        321 GGGGAACAGCCCCAGTTCTGGTCGAAGACGCAGGTTCTGGACTGGATCAGCTACCAAGTG 380

Qy        241 GAGAAGAACAAGTACGACGCAAGCGCCATTGACTTCTCACGATGTGACATGGATGGCGCC 300
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        381 GAGAAGAACAAGTACGACGCAAGCGCCATTGACTTCTCACGATGTGACATGGATGGCGCC 440

Qy        301 ACCCTCTGCAATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGCCTCTGGGGGACCAA 360
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        441 ACCCTCTGCAATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGCCTCTGGGGGACCAA 500

Qy        361 CTCCATGCCCAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATT 420
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        501 CTCCATGCCCAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATT 560

Qy        421 GAGCTGCTGGAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCCTTTGAC 480
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        561 GAGCTGCTGGAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCCTTTGAC 620

Qy        481 CAGGGCAGCCCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCAC 540
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        621 CAGGGCAGCCCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCAC 680

Qy        541 CCCGGCAGCTGTGGCGCAGGAGCCCCCTCCCCTGGCAGCTCTGACGTCTCCACCGCAGGG 600
              ||||||||||||||||||||||||||||||||:|||||||||||||||||||||||||||||
Db        681 CCCGGCAGCTGTGGCGCAGGAGCCCCCTCCCCYGGCAGCTCTGACGTCTCCACCGCAGGG 740

Qy        601 ACTGGTGCTTCTCGGAGCTCCCACTCCTCAGACTCCGGTGGAAGTGACGTGGACCTGGAT 660
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        741 ACTGGTGCTTCTCGGAGCTCCCACTCCTCAGACTCCGGTGGAAGTGACGTGGACCTGGAT 800

Qy        661 CCCACTGATGGCAAGCTCTTCCCCAGCGATGGTTTTCGTGACTGCAAGAAGGGGGATCCC 720
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        801 CCCACTGATGGCAAGCTCTTCCCCAGCGATGGTTTTCGTGACTGCAAGAAGGGGGATCCC 860

Qy        721 AAGCACGGGAAGCGGAAACGAGGCCGGCCCCGAAAGCTGAGCAAAGAGTACTGGGACTGT 780
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        861 AAGCACGGGAAGCGGAAACGAGGCCGGCCCCGAAAGCTGAGCAAAGAGTACTGGGACTGT 920

Qy        781 CTCGAGGGCAAGAAGAGCAAGCACGCGCCCAGAGGCACCCACCTGTGGGAGTTCATCCGG 840
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        921 CTCGAGGGCAAGAAGAGCAAGCACGCGCCCAGAGGCACCCACCTGTGGGAGTTCATCCGG 980

Qy        841 GACATCCTCATCCACCCGGAGCTCAACGAGGGCCTCATGAAGTGGGAGAATCGGCATGAA 900
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        981 GACATCCTCATCCACCCGGAGCTCAACGAGGGCCTCATGAAGTGGGAGAATCGGCATGAA 1040

Qy        901 GGCGTCTTCAAGTTCCTGCGCTCCGAGGCTGTGGCCCAACTATGGGGCCAAAAGAAAAAG 960
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1041 GGCGTCTTCAAGTTCCTGCGCTCCGAGGCTGTGGCCCAACTATGGGGCCAAAAGAAAAAG 1100

Qy        961 AACAGCAACATGACCTACGAGAAGCTGAGCCGGGCCATGAGGTACTACTACAAACGGGAG 1020
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1101 AACAGCAACATGACCTACGAGAAGCTGAGCCGGGCCATGAGGTACTACTACAAACGGGAG 1160

Qy       1021 ATCCTGGAACGGGTGGATGGCCGGCGACTCGTCTACAAGTTTGGCAAAAACTCAAGCGGC 1080
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1161 ATCCTGGAACGGGTGGATGGCCGGCGACTCGTCTACAAGTTTGGCAAAAACTCAAGCGGC 1220

Qy       1081 TGGAAGGAGGAAGAGGTTCTCCAGAGTCGGAACTGA 1116
              |||||||||||||||||||||||||||||||||||
Db       1221 TGGAAGGAGGAAGAGGTTCTCCAGAGTCGGAACTGA 1256


RESULT 9
US-10-264-049-756
; Sequence 756, Application US/10264049
; Publication No. US20040005579A1
; GENERAL INFORMATION:
;  APPLICANT: Birse et al.
;  TITLE OF INVENTION: Nucleic Acids, Proteins, and Antibodies
;  FILE REFERENCE: PA133P1
;  CURRENT APPLICATION NUMBER: US/10/264,049
;  CURRENT FILING DATE:  2002-10-04
;  PRIOR APPLICATION NUMBER: PCT/US01/18569
;  PRIOR FILING DATE: 2001-06-07
;  PRIOR APPLICATION NUMBER: US 60/209,467
;  PRIOR FILING DATE: 2000-06-07
;  NUMBER OF SEQ ID NOS: 4360
;  SOFTWARE: PatentIn Ver. 3.1
; SEQ ID NO 756
;   LENGTH: 1956
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-10-264-049-756

  Query Match            99.9%;  Score 1114.4;  DB 12;  Length 1956;
  Best Local Similarity  99.6%;  Pred. No. 5.9e-313;
  Matches 1112;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 ATGGCTGCAACCTGTGAGATTAGCAACATTTTTAGCAACTACTTCAGTGCGATGTACAGC 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        161 ATGGCTGCAACCTGTGAGATTAGCAACATTTTTAGCAACTACTTCAGTGCGATGTACAGC 220
```

```
Qy        61 TCGGAGGACTCCACCCTGGCCTCTGTTCCCCCTGCTGCCACCTTTGGGGCCGATGACTTG 120
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       221 TCGGAGGACTCCACCCTGGCCTCTGTTCCCCCTGCTGCCACCTTTGGGGCCGATGACTTG 280

Qy       121 GTACTGACCCTGAGCAACCCCCAGATGTCATTGGAGGGTACAGAGAAGGCCAGCTGGTTG 180
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       281 GTACTGACCCTGAGCAACCCCCAGATGTCATTGGAGGGTACAGAGAAGGCCAGCTGGTTG 340

Qy       181 GGGGAACAGCCCCAGTTCTGGTCGAAGACGCAGGTTCTGGACTGGATCAGCTACCAAGTG 240
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       341 GGGGAACAGCCCCAGTTCTGGTCGAAGACGCAGGTTCTGGACTGGATCAGCTACCAAGTG 400

Qy       241 GAGAAGAACAAGTACGACGCAAGCGCCATTGACTTCTCACGATGTGACATGGATGGCGCC 300
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       401 GAGAAGAACAAGTACGACGCAAGCGCCATTGACTTCTCACGATGTGACATGGATGGCGCC 460

Qy       301 ACCCTCTGCAATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGCCTCTGGGGGACCAA 360
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       461 ACCCTCTGCAATTGTGCCCTTGAGGAGCTGCGTCTGGTCTTTGGGCCTCTGGGGGACCAA 520

Qy       361 CTCCATGCCCAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATT 420
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       521 CTCCATGCCCAGCTGCGAGACCTCACTTCCAGCTCTTCTGATGAGCTCAGTTGGATCATT 580

Qy       421 GAGCTGCTGGAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCCTTTGAC 480
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       581 GAGCTGCTGGAGAAGGATGGCATGGCCTTCCAGGAGGCCCTAGACCCAGGGCCCTTTGAC 640

Qy       481 CAGGGCAGCCCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCAC 540
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       641 CAGGGCAGCCCCTTTGCCCAGGAGCTGCTGGACGACGGTCAGCAAGCCAGCCCCTACCAC 700

Qy       541 CCCGGCAGCTGTGGCGCAGGAGCCCCCTCCCCTGGCAGCTCTGACGTCTCCACCGCAGGG 600
             ||||||||||||||||||||||||||||||||||:||||||||||||||||||||||||||||||
Db       701 CCCGGCAGCTGTGGCGCAGGAGCCCCCTCCCCYGGCAGCTCTGACGTCTCCACCGCAGGG 760

Qy       601 ACTGGTGCTTCTCGGAGCTCCCACTCCTCAGACTCCGGTGGAAGTGACGTGGACCTGGAT 660
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       761 ACTGGTGCTTCTCGGAGCTCCCACTCCTCAGACTCCGGTGGAAGTGACGTGGACCTGGAT 820

Qy       661 CCCACTGATGGCAAGCTCTTCCCCAGCGATGGTTTTCGTGACTGCAAGAAGGGGGATCCC 720
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       821 CCCACTGATGGCAAGCTCTTCCCCAGCGATGGTTTTCGTGACTGCAAGAAGGGGGATCCC 880

Qy       721 AAGCACGGGAAGCGGAAACGAGGCCGGCCCCGAAAGCTGAGCAAAGAGTACTGGGACTGT 780
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       881 AAGCACGGGAAGCGGAAACGAGGCCGGCCCCGAAAGCTGAGCAAAGAGTACTGGGACTGT 940

Qy       781 CTCGAGGGCAAGAAGAGCAAGCACGCGCCCAGAGGCACCCACCTGTGGGAGTTCATCCGG 840
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       941 CTCGAGGGCAAGAAGAGCAAGCACGCGCCCAGAGGCACCCACCTGTGGGAGTTCATCCGG 1000

Qy       841 GACATCCTCATCCACCCGGAGCTCAACGAGGGCCTCATGAAGTGGGAGAATCGGCATGAA 900
             ||||||||||||||||||||:||||||||||:||||||||||||||||||||||||||||||||
Db      1001 GACATCCTCATCCACCCGGAGCTYAACGAGGGCCTYATGAAGTGGGAGAATCGGCATGAA 1060

Qy       901 GGCGTCTTCAAGTTCCTGCGCTCCGAGGCTGTGGCCCAACTATGGGGCCAAAAGAAAAAG 960
             ||||||||||||||||||||:||||||||||||||||||||||||||||||||||||||||||
Db      1061 GGCGTCTTCAAGTTCCTGCGYTCCGAGGCTGTGGCCCAACTATGGGGCCAAAAGAAAAAG 1120

Qy       961 AACAGCAACATGACCTACGAGAAGCTGAGCCGGGCCATGAGGTACTACTACAAACGGGAG 1020
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      1121 AACAGCAACATGACCTACGAGAAGCTGAGCCGGGCCATGAGGTACTACTACAAACGGGAG 1180

Qy      1021 ATCCTGGAACGGGTGGATGGCCGGCGACTCGTCTACAAGTTTGGCAAAAACTCAAGCGGC 1080
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      1181 ATCCTGGAACGGGTGGATGGCCGGCGACTCGTCTACAAGTTTGGCAAAAACTCAAGCGGC 1240

Qy      1081 TGGAAGGAGGAAGAGGTTCTCCAGAGTCGGAACTGA 1116
             ||||||||||||||||||||||||||||||||||||
Db      1241 TGGAAGGAGGAAGAGGTTCTCCAGAGTCGGAACTGA 1276
```

```
RESULT 10
US-10-131-410-64
; Sequence 64, Application US/10131410
; Publication No. US20030235915A1
; GENERAL INFORMATION:
;  APPLICANT: SPECHT, THOMAS
;  APPLICANT:  HINZMANN, BERND
;  APPLICANT:  SCHMITT, ARMIN
;  APPLICANT:  PILARSKY, CHRISTIAN
;  APPLICANT:  DAHL, EDGAR
;  APPLICANT:  ROSENTHAL, ANDRE
;  TITLE OF INVENTION: HUMAN NUCLEIC ACID SEQUENCES FROM TISSUE OF BREAST
;  TITLE OF INVENTION:  TUMORS
;  FILE REFERENCE: SCH-1763
;  CURRENT APPLICATION NUMBER: US/10/131,410
;  CURRENT FILING DATE:  2002-04-25
;  PRIOR APPLICATION NUMBER: 09/646,673
;  PRIOR FILING DATE: 2000-09-20
;  PRIOR APPLICATION NUMBER: PCT/DE99/00908
;  PRIOR FILING DATE: 1999-03-19
;  NUMBER OF SEQ ID NOS: 202
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 64
;   LENGTH: 2269
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-10-131-410-64

  Query Match            83.6%;  Score 933;  DB 12;  Length 2269;
  Best Local Similarity  99.3%;  Pred. No. 2.7e-260;
  Matches  958;  Conservative    0;  Mismatches    5;  Indels    2;  Gaps    2;

Qy       152 TGGAGGGTACAGAGAAGGCCAGCTGGTTGGGGGAACAGCCCCAGTTCTGGTCGAAGACGC 211
             |||   | ||||||||||||||||||||||||||||||||||||||||||||||||||| ||
Db         4 TGGCCCTTGCAGAGAAGGCCAGCTGGTTGGGGGAACAGCCCCAGTTCTGGTCGAAGA-GC 62

Qy       212 AGGTTCTGGACTGGATCAGCTACCAAGTGGAGAAGAACAAGTACGACGCAAGCGCCATTG 271
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        63 AGGTTCTGGACTGGATCAGCTACCAAGTGGAGAAGAACAAGTACGACGCAAGCGCCATTG 122

Qy       272 ACTTCTCACGATGTGACATGGATGGCGCCACCCTCTGCAATTGTGCCCTTGAGGAGCTGC 331
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       123 ACTTCTCACGATGTGACATGGATGGCGCCACCCTCTGCAATTGTGCCCTTGAGGAGCTGC 182

Qy       332 GTCTGGTCTTTGGGCCTCTGGGGGACCAACTCCATGCCCAGCTGCGAGACCTCACTTCCA 391
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       183 GTCTGGTCTTTGGGCCTCTGGGGGACCAACTCCATGCCCAGCTGCGAGACCTCACTTCCA 242

Qy       392 GCTCTTCTGATGAGCTCAGTTGGATCATTGAGCTGCTGGAGAAGGATGGCATGGCCTTCC 451
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       243 GCTCTTCTGATGAGCTCAGTTGGATCATTGAGCTGCTGGAGAAGGATGGCATGGCCTTCC 302

Qy       452 AGGAGGCCCTAGACCCAGGGCCCTTTGACCAGGGCAGCCCCTTTGCCCAGGAGCTGCTGG 511
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       303 AGGAGGCCCTAGACCCAGGGCCCTTTGACCAGGGCAGCCCCTTTGCCCAGGAGCTGCTGG 362

Qy       512 ACGACGGTCAGCAAGCCAGCCCCTACCACCCCGGCAGCTGTGGCGCAGGAGCCCCCTCCC 571
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       363 ACGACGGTCAGCAAGCCAGCCCCTACCACCCCGGCAGCTGTGGCGCAGGAGCCCCCTCCC 422

Qy       572 CTGGCAGCTCTGACGTCTCCACCGCAGGGACTGGTGCTTCTCGGAGCTCCCACTCCTCAG 631
             |||||||||||||||||||||||| |||||||||||||||||||||||||||||||||||||
Db       423 CTGGCAGCTCTGACGTCTCCACCGCA-GGACTGGTGCTTCTCGGAGCTCCCACTCCTCAG 481

Qy       632 ACTCCGGTGGAAGTGACGTGGACCTGGATCCCACTGATGGCAAGCTCTTCCCCAGCGATG 691
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       482 ACTCCGGTGGAAGTGACGTGGACCTGGATCCCACTGATGGCAAGCTCTTCCCCAGCGATG 541

Qy       692 GTTTTCGTGACTGCAAGAAGGGGGATCCCAAGCACGGGAAGCGGAAACGAGGCCGGCCCC 751
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       542 GTTTTCGTGACTGCAAGAAGGGGGATCCCAAGCACGGGAAGCGGAAACGAGGCCGGCCCC 601

Qy       752 GAAAGCTGAGCAAAGAGTACTGGGACTGTCTCGAGGGCAAGAAGAGCAAGCACGCGCCCA 811
```

```
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        602 GAAAGCTGAGCAAAGAGTACTGGGACTGTCTCGAGGGCAAGAAGAGCAAGCACGCGCCCA 661

Qy        812 GAGGCACCCACCTGTGGGAGTTCATCCGGGACATCCTCATCCACCCGGAGCTCAACGAGG 871
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        662 GAGGCACCCACCTGTGGGAGTTCATCCGGGACATCCTCATCCACCCGGAGCTCAACGAGG 721

Qy        872 GCCTCATGAAGTGGGAGAATCGGCATGAAGGCGTCTTCAAGTTCCTGCGCTCCGAGGCTG 931
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        722 GCCTCATGAAGTGGGAGAATCGGCATGAAGGCGTCTTCAAGTTCCTGCGCTCCGAGGCTG 781

Qy        932 TGGCCCAACTATGGGGCCAAAAGAAAAAGAACAGCAACATGACCTACGAGAAGCTGAGCC 991
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        782 TGGCCCAACTATGGGGCCAAAAGAAAAAGAACAGCAACATGACCTACGAGAAGCTGAGCC 841

Qy        992 GGGCCATGAGGTACTACTACAAACGGGAGATCCTGGAACGGGTGGATGGCCGGCGACTCG 1051
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        842 GGGCCATGAGGTACTACTACAAACGGGAGATCCTGGAACGGGTGGATGGCCGGCGACTCG 901

Qy       1052 TCTACAAGTTTGGCAAAAACTCAAGCGGCTGGAAGGAGGAAGAGGTTCTCCAGAGTCGGA 1111
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        902 TCTACAAGTTTGGCAAAAACTCAAGCGGCTGGAAGGAGGAAGAGGTTCTCCAGAGTCGGA 961

Qy       1112 ACTGA 1116
                |||||
Db        962 ACTGA 966


RESULT 11
US-09-922-217-853/c
; Sequence 853, Application US/09922217
; Patent No. US20020076414A1
; GENERAL INFORMATION:
;  APPLICANT: Xu, Jiangchun
;  APPLICANT:  Lodes, Michael J.
;  APPLICANT:  Secrist, Heather
;  APPLICANT:  Benson, Darin R.
;  APPLICANT:  Meagher, Madeleine Joy
;  APPLICANT:  Stolk, John A.
;  APPLICANT:  Wang, Tongtong
;  APPLICANT:  Jiang, Yuqiu
;  APPLICANT:  Smith, Carole Lynn
;  APPLICANT:  King, Gordon E.
;  APPLICANT:  Wang, Aijun
;  APPLICANT:  Clapper, Jonathan D.
;  TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY AND DIAGNOSIS
;  TITLE OF INVENTION:  OF COLON CANCER AND METHODS FOR THEIR USE
;  FILE REFERENCE: 210121.471C13
;  CURRENT APPLICATION NUMBER: US/09/922,217
;  CURRENT FILING DATE:  2001-08-03
;  NUMBER OF SEQ ID NOS: 1124
;  SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 853
;   LENGTH: 626
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-922-217-853

  Query Match            55.9%;  Score 624.4;  DB 9;  Length 626;
  Best Local Similarity   99.8%;  Pred. No. 6.5e-171;
  Matches  625;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        155 AGGGTACAGAGAAGGCCAGCTGGTTGGGGGAACAGCCCCAGTTCTGGTCGAAGACGCAGG 214
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        626 AGGGTACAGAGAAGGCCAGCTGGTTGGGGGAACAGCCCCAGTTCTGGTCGAAGACGCAGG 567

Qy        215 TTCTGGACTGGATCAGCTACCAAGTGGAGAAGAACAAGTACGACGCAAGCGCCATTGACT 274
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        566 TTCTGGACTGGATCAGCTACCAAGTGGAGAAGAACAAGTACGACGCAAGCGCCATTGACT 507

Qy        275 TCTCACGATGTGACATGGATGGCGCCACCCTCTGCAATTGTGCCCTTGAGGAGCTGCGTC 334
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        506 TCTCACGATGTGACATGGATGGCGCCACCCTCTGCAATTGTGCCCTTGAGGAGCTGCGTC 447

Qy        335 TGGTCTTTGGGCCTCTGGGGGACCAACTCCATGCCCAGCTGCGAGACCTCACTTCCAGCT 394
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        446 TGGTCTTTGGGCCTCTGGGGGACCAACTCCATGCCCAGCTGCGAGACCTCACTTCCAGCT 387

Qy        395 CTTCTGATGAGCTCAGTTGGATCATTGAGCTGCTGGAGAAGGATGGCATGGCCTTCCAGG 454
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        386 CTTCTGATGAGCTCAGTTGGATCATTGAGCTGCTGGAGAAGGATGGCATGGCCTTCCAGG 327

Qy        455 AGGCCCTAGACCCAGGGCCCTTTGACCAGGGCAGCCCCTTTGCCCAGGAGCTGCTGGACG 514
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        326 AGGCCCTAGACCCAGGGCCCTTTGACCAGGGCAGCCCCTTTGCCCAGGAGCTGCTGGACG 267

Qy        515 ACGGTCAGCAAGCCAGCCCCTACCACCCCGGCAGCTGTGGCGCAGGAGCCCCCTCCCCTG 574
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||| |
Db        266 ACGGTCAGCAAGCCAGCCCCTACCACCCCGGCAGCTGTGGCGCAGGAGCCCCCTCCCCCG 207

Qy        575 GCAGCTCTGACGTCTCCACCGCAGGGACTGGTGCTTCTCGGAGCTCCCACTCCTCAGACT 634
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        206 GCAGCTCTGACGTCTCCACCGCAGGGACTGGTGCTTCTCGGAGCTCCCACTCCTCAGACT 147

Qy        635 CCGGTGGAAGTGACGTGGACCTGGATCCCACTGATGGCAAGCTCTTCCCCAGCGATGGTT 694
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        146 CCGGTGGAAGTGACGTGGACCTGGATCCCACTGATGGCAAGCTCTTCCCCAGCGATGGTT 87

Qy        695 TTCGTGACTGCAAGAAGGGGGATCCCAAGCACGGGAAGCGGAAACGAGGCCGGCCCCGAA 754
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         86 TTCGTGACTGCAAGAAGGGGGATCCCAAGCACGGGAAGCGGAAACGAGGCCGGCCCCGAA 27

Qy        755 AGCTGAGCAAAGAGTACTGGGACTGT 780
                |||||||||||||||||||||||||
Db         26 AGCTGAGCAAAGAGTACTGGGACTGT 1


RESULT 12
US-09-833-263-853/c
; Sequence 853, Application US/09833263
; Patent No. US20020110547A1
; GENERAL INFORMATION:
;  APPLICANT: Wang, Aijun
;  APPLICANT:  Clapper, Jonathan D.
;  APPLICANT:  Stolk, John A.
;  APPLICANT:  Meagher, Madeleine J.
;  TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY AND
;  TITLE OF INVENTION:  DIAGNOSIS OF COLON CANCER AND METHODS FOR THEIR USE
;  FILE REFERENCE: 210121.471C12
;  CURRENT APPLICATION NUMBER: US/09/833,263
;  CURRENT FILING DATE:  2001-04-10
;  NUMBER OF SEQ ID NOS: 1093
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 853
;   LENGTH: 626
;   TYPE: DNA
;   ORGANISM: Homo sapien
US-09-833-263-853

  Query Match            55.9%;  Score 624.4;  DB 10;  Length 626;
  Best Local Similarity   99.8%;  Pred. No. 6.5e-171;
  Matches  625;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        155 AGGGTACAGAGAAGGCCAGCTGGTTGGGGGAACAGCCCCAGTTCTGGTCGAAGACGCAGG 214
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        626 AGGGTACAGAGAAGGCCAGCTGGTTGGGGGAACAGCCCCAGTTCTGGTCGAAGACGCAGG 567

Qy        215 TTCTGGACTGGATCAGCTACCAAGTGGAGAAGAACAAGTACGACGCAAGCGCCATTGACT 274
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        566 TTCTGGACTGGATCAGCTACCAAGTGGAGAAGAACAAGTACGACGCAAGCGCCATTGACT 507

Qy        275 TCTCACGATGTGACATGGATGGCGCCACCCTCTGCAATTGTGCCCTTGAGGAGCTGCGTC 334
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        506 TCTCACGATGTGACATGGATGGCGCCACCCTCTGCAATTGTGCCCTTGAGGAGCTGCGTC 447

Qy        335 TGGTCTTTGGGCCTCTGGGGGACCAACTCCATGCCCAGCTGCGAGACCTCACTTCCAGCT 394
```

```
                |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        446 TGGTCTTTGGGCCTCTGGGGGACCAACTCCATGCCCAGCTGCGAGACCTCACTTCCAGCT 387

Qy        395 CTTCTGATGAGCTCAGTTGGATCATTGAGCTGCTGGAGAAGGATGGCATGGCCTTCCAGG 454
                |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        386 CTTCTGATGAGCTCAGTTGGATCATTGAGCTGCTGGAGAAGGATGGCATGGCCTTCCAGG 327

Qy        455 AGGCCCTAGACCCAGGGCCCTTTGACCAGGGCAGCCCCTTTGCCCAGGAGCTGCTGGACG 514
                |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        326 AGGCCCTAGACCCAGGGCCCTTTGACCAGGGCAGCCCCTTTGCCCAGGAGCTGCTGGACG 267

Qy        515 ACGGTCAGCAAGCCAGCCCCTACCACCCCGGCAGCTGTGGCGCAGGAGCCCCCTCCCCTG 574
                |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||| |
Db        266 ACGGTCAGCAAGCCAGCCCCTACCACCCCGGCAGCTGTGGCGCAGGAGCCCCCTCCCCCG 207

Qy        575 GCAGCTCTGACGTCTCCACCGCAGGGACTGGTGCTTCTCGGAGCTCCCACTCCTCAGACT 634
                |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        206 GCAGCTCTGACGTCTCCACCGCAGGGACTGGTGCTTCTCGGAGCTCCCACTCCTCAGACT 147

Qy        635 CCGGTGGAAGTGACGTGGACCTGGATCCCACTGATGGCAAGCTCTTCCCCAGCGATGGTT 694
                |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        146 CCGGTGGAAGTGACGTGGACCTGGATCCCACTGATGGCAAGCTCTTCCCCAGCGATGGTT 87

Qy        695 TTCGTGACTGCAAGAAGGGGGATCCCAAGCACGGGAAGCGGAAACGAGGCCGGCCCCGAA 754
                |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         86 TTCGTGACTGCAAGAAGGGGGATCCCAAGCACGGGAAGCGGAAACGAGGCCGGCCCCGAA 27

Qy        755 AGCTGAGCAAAGAGTACTGGGACTGT 780
                |||||||||||||||||||||||||
Db         26 AGCTGAGCAAAGAGTACTGGGACTGT 1


RESULT 13
US-10-025-380-853/c
; Sequence 853, Application US/10025380
; Publication No. US20020182191A1
; GENERAL INFORMATION:
;  APPLICANT: Xu, Jiangchun
;  APPLICANT:  Lodes, Michael J.
;  APPLICANT:  Secrist, Heather
;  APPLICANT:  Benson, Darin R.
;  APPLICANT:  Meagher, Madeleine Joy
;  APPLICANT:  Stolk, John A.
;  APPLICANT:  Wang, Tongtong
;  APPLICANT:  Jiang, Yuqiu
;  APPLICANT:  Smith, Carole L.
;  APPLICANT:  King, Gordon E.
;  APPLICANT:  Wang, Aijun
;  APPLICANT:  Clapper, Jonathan D.
;  APPLICANT:  Skeiky, Yasir A. W.
;  APPLICANT:  Fanger, Gary R.
;  APPLICANT:  Vedvick Thomas S.
;  APPLICANT:  Carter, Darrick
;  TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY AND DIAGNOSIS
;  TITLE OF INVENTION:  OF COLON CANCER AND METHODS FOR THEIR USE
;  FILE REFERENCE: 210121.471C14
;  CURRENT APPLICATION NUMBER: US/10/025,380
;  CURRENT FILING DATE:  2001-12-19
;  NUMBER OF SEQ ID NOS: 1129
;  SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 853
;   LENGTH: 626
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-10-025-380-853

  Query Match             55.9%;  Score 624.4;  DB 14;  Length 626;
  Best Local Similarity   99.8%;  Pred. No. 6.5e-171;
  Matches  625;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        155 AGGGTACAGAGAAGGCCAGCTGGTTGGGGGAACAGCCCCAGTTCTGGTCGAAGACGCAGG 214
                |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        626 AGGGTACAGAGAAGGCCAGCTGGTTGGGGGAACAGCCCCAGTTCTGGTCGAAGACGCAGG 567

Qy        215 TTCTGGACTGGATCAGCTACCAAGTGGAGAAGAACAAGTACGACGCAAGCGCCATTGACT 274
                |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        566 TTCTGGACTGGATCAGCTACCAAGTGGAGAAGAACAAGTACGACGCAAGCGCCATTGACT 507

Qy        275 TCTCACGATGTGACATGGATGGCGCCACCCTCTGCAATTGTGCCCTTGAGGAGCTGCGTC 334
                |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        506 TCTCACGATGTGACATGGATGGCGCCACCCTCTGCAATTGTGCCCTTGAGGAGCTGCGTC 447

Qy        335 TGGTCTTTGGGCCTCTGGGGGACCAACTCCATGCCCAGCTGCGAGACCTCACTTCCAGCT 394
                |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        446 TGGTCTTTGGGCCTCTGGGGGACCAACTCCATGCCCAGCTGCGAGACCTCACTTCCAGCT 387

Qy        395 CTTCTGATGAGCTCAGTTGGATCATTGAGCTGCTGGAGAAGGATGGCATGGCCTTCCAGG 454
                |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        386 CTTCTGATGAGCTCAGTTGGATCATTGAGCTGCTGGAGAAGGATGGCATGGCCTTCCAGG 327

Qy        455 AGGCCCTAGACCCAGGGCCCTTTGACCAGGGCAGCCCCTTTGCCCAGGAGCTGCTGGACG 514
                |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        326 AGGCCCTAGACCCAGGGCCCTTTGACCAGGGCAGCCCCTTTGCCCAGGAGCTGCTGGACG 267

Qy        515 ACGGTCAGCAAGCCAGCCCCTACCACCCCGGCAGCTGTGGCGCAGGAGCCCCCTCCCCTG 574
                |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||| |
Db        266 ACGGTCAGCAAGCCAGCCCCTACCACCCCGGCAGCTGTGGCGCAGGAGCCCCCTCCCCCG 207

Qy        575 GCAGCTCTGACGTCTCCACCGCAGGGACTGGTGCTTCTCGGAGCTCCCACTCCTCAGACT 634
                |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        206 GCAGCTCTGACGTCTCCACCGCAGGGACTGGTGCTTCTCGGAGCTCCCACTCCTCAGACT 147

Qy        635 CCGGTGGAAGTGACGTGGACCTGGATCCCACTGATGGCAAGCTCTTCCCCAGCGATGGTT 694
                |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        146 CCGGTGGAAGTGACGTGGACCTGGATCCCACTGATGGCAAGCTCTTCCCCAGCGATGGTT 87

Qy        695 TTCGTGACTGCAAGAAGGGGGATCCCAAGCACGGGAAGCGGAAACGAGGCCGGCCCCGAA 754
                |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         86 TTCGTGACTGCAAGAAGGGGGATCCCAAGCACGGGAAGCGGAAACGAGGCCGGCCCCGAA 27

Qy        755 AGCTGAGCAAAGAGTACTGGGACTGT 780
                |||||||||||||||||||||||||
Db         26 AGCTGAGCAAAGAGTACTGGGACTGT 1


RESULT 14
US-09-922-217-944/c
; Sequence 944, Application US/09922217
; Patent No. US20020076414A1
; GENERAL INFORMATION:
;  APPLICANT: Xu, Jiangchun
;  APPLICANT:  Lodes, Michael J.
;  APPLICANT:  Secrist, Heather
;  APPLICANT:  Benson, Darin R.
;  APPLICANT:  Meagher, Madeleine Joy
;  APPLICANT:  Stolk, John A.
;  APPLICANT:  Wang, Tongtong
;  APPLICANT:  Jiang, Yuqiu
;  APPLICANT:  Smith, Carole Lynn
;  APPLICANT:  King, Gordon E.
;  APPLICANT:  Wang, Aijun
;  APPLICANT:  Clapper, Jonathan D.
;  TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY AND DIAGNOSIS
;  TITLE OF INVENTION:  OF COLON CANCER AND METHODS FOR THEIR USE
;  FILE REFERENCE: 210121.471C13
;  CURRENT APPLICATION NUMBER: US/09/922,217
;  CURRENT FILING DATE:  2001-08-03
;  NUMBER OF SEQ ID NOS: 1124
;  SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 944
;   LENGTH: 563
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-922-217-944

  Query Match             50.3%;  Score 561.4;  DB 9;  Length 563;
```

Best Local Similarity 99.8%; Pred. No. 1.2e-152;
Matches 562; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

```
Qy        219 GGACTGGATCAGCTACCAAGTGGAGAAGAACAAGTACGACGCAAGCGCCATTGACTTCTC 278
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        563 GGACTGGATCAGCTACCAAGTGGAGAAGAACAAGTACGACGCAAGCGCCATTGACTTCTC 504

Qy        279 ACGATGTGACATGGATGGCGCCACCCTCTGCAATTGTGCCCTTGAGGAGCTGCGTCTGGT 338
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        503 ACGATGTGACATGGATGGCGCCACCCTCTGCAATTGTGCCCTTGAGGAGCTGCGTCTGGT 444

Qy        339 CTTTGGGCCTCTGGGGGACCAACTCCATGCCCAGCTGCGAGACCTCACTTCCAGCTCTTC 398
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        443 CTTTGGGCCTCTGGGGGACCAACTCCATGCCCAGCTGCGAGACCTCACTTCCAGCTCTTC 384

Qy        399 TGATGAGCTCAGTTGGATCATTGAGCTGCTGGAGAAGGATGGCATGGCCTTCCAGGAGGC 458
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        383 TGATGAGCTCAGTTGGATCATTGAGCTGCTGGAGAAGGATGGCATGGCCTTCCAGGAGGC 324

Qy        459 CCTAGACCCAGGGCCCTTTGACCAGGGCAGCCCCTTTGCCCAGGAGCTGCTGGACGACGG 518
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        323 CCTAGACCCAGGGCCCTTTGACCAGGGCAGCCCCTTTGCCCAGGAGCTGCTGGACGACGG 264

Qy        519 TCAGCAAGCCAGCCCCTACCACCCCGGCAGCTGTGGCGCAGGAGCCCCCTCCCCTGGCAG 578
              |||||||||||||||||||||||||||||||||||||||||||||||||||| |||||
Db        263 TCAGCAAGCCAGCCCCTACCACCCCGGCAGCTGTGGCGCAGGAGCCCCCTCCCCCGGCAG 204

Qy        579 CTCTGACGTCTCCACCGCAGGGACTGGTGCTTCTCGGAGCTCCCACTCCTCAGACTCCGG 638
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        203 CTCTGACGTCTCCACCGCAGGGACTGGTGCTTCTCGGAGCTCCCACTCCTCAGACTCCGG 144

Qy        639 TGGAAGTGACGTGGACCTGGATCCCACTGATGGCAAGCTCTTCCCCAGCGATGGTTTTCG 698
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        143 TGGAAGTGACGTGGACCTGGATCCCACTGATGGCAAGCTCTTCCCCAGCGATGGTTTTCG 84

Qy        699 TGACTGCAAGAAGGGGGATCCCAAGCACGGGAAGCGGAAACGAGGCCGGCCCCGAAAGCT 758
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         83 TGACTGCAAGAAGGGGGATCCCAAGCACGGGAAGCGGAAACGAGGCCGGCCCCGAAAGCT 24

Qy        759 GAGCAAAGAGTACTGGGACTGTC 781
              |||||||||||||||||||||||
Db         23 GAGCAAAGAGTACTGGGACTGTC 1
```

RESULT 15
US-09-833-263-944/c
; Sequence 944, Application US/09833263
; Patent No. US20020110547A1
; GENERAL INFORMATION:
; APPLICANT: Wang, Aijun
; APPLICANT: Clapper, Jonathan D.
; APPLICANT: Stolk, John A.
; APPLICANT: Meagher, Madeleine J.
; TITLE OF INVENTION: COMPOUNDS FOR IMMUNOTHERAPY AND
; TITLE OF INVENTION: DIAGNOSIS OF COLON CANCER AND METHODS FOR THEIR USE
; FILE REFERENCE: 210121.471C12
; CURRENT APPLICATION NUMBER: US/09/833,263
; CURRENT FILING DATE: 2001-04-10
; NUMBER OF SEQ ID NOS: 1093
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 944
; LENGTH: 563
; TYPE: DNA
; ORGANISM: Homo sapien
US-09-833-263-944

Query Match 50.3%; Score 561.4; DB 10; Length 563;
Best Local Similarity 99.8%; Pred. No. 1.2e-152;
Matches 562; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

```
Qy        219 GGACTGGATCAGCTACCAAGTGGAGAAGAACAAGTACGACGCAAGCGCCATTGACTTCTC 278
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        563 GGACTGGATCAGCTACCAAGTGGAGAAGAACAAGTACGACGCAAGCGCCATTGACTTCTC 504

Qy        279 ACGATGTGACATGGATGGCGCCACCCTCTGCAATTGTGCCCTTGAGGAGCTGCGTCTGGT 338
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        503 ACGATGTGACATGGATGGCGCCACCCTCTGCAATTGTGCCCTTGAGGAGCTGCGTCTGGT 444

Qy        339 CTTTGGGCCTCTGGGGGACCAACTCCATGCCCAGCTGCGAGACCTCACTTCCAGCTCTTC 398
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        443 CTTTGGGCCTCTGGGGGACCAACTCCATGCCCAGCTGCGAGACCTCACTTCCAGCTCTTC 384

Qy        399 TGATGAGCTCAGTTGGATCATTGAGCTGCTGGAGAAGGATGGCATGGCCTTCCAGGAGGC 458
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        383 TGATGAGCTCAGTTGGATCATTGAGCTGCTGGAGAAGGATGGCATGGCCTTCCAGGAGGC 324

Qy        459 CCTAGACCCAGGGCCCTTTGACCAGGGCAGCCCCTTTGCCCAGGAGCTGCTGGACGACGG 518
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        323 CCTAGACCCAGGGCCCTTTGACCAGGGCAGCCCCTTTGCCCAGGAGCTGCTGGACGACGG 264

Qy        519 TCAGCAAGCCAGCCCCTACCACCCCGGCAGCTGTGGCGCAGGAGCCCCCTCCCCTGGCAG 578
              |||||||||||||||||||||||||||||||||||||||||||||||||||| |||||
Db        263 TCAGCAAGCCAGCCCCTACCACCCCGGCAGCTGTGGCGCAGGAGCCCCCTCCCCCGGCAG 204

Qy        579 CTCTGACGTCTCCACCGCAGGGACTGGTGCTTCTCGGAGCTCCCACTCCTCAGACTCCGG 638
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        203 CTCTGACGTCTCCACCGCAGGGACTGGTGCTTCTCGGAGCTCCCACTCCTCAGACTCCGG 144

Qy        639 TGGAAGTGACGTGGACCTGGATCCCACTGATGGCAAGCTCTTCCCCAGCGATGGTTTTCG 698
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        143 TGGAAGTGACGTGGACCTGGATCCCACTGATGGCAAGCTCTTCCCCAGCGATGGTTTTCG 84

Qy        699 TGACTGCAAGAAGGGGGATCCCAAGCACGGGAAGCGGAAACGAGGCCGGCCCCGAAAGCT 758
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         83 TGACTGCAAGAAGGGGGATCCCAAGCACGGGAAGCGGAAACGAGGCCGGCCCCGAAAGCT 24

Qy        759 GAGCAAAGAGTACTGGGACTGTC 781
              |||||||||||||||||||||||
Db         23 GAGCAAAGAGTACTGGGACTGTC 1
```

Search completed: February 13, 2004, 11:48:18
Job time : 396.438 secs